NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

VOL. XVI. BOSTON, MAY, 1864. NO. 5.

NOURSE, EATON & TOLMAN, PROPRIETORS.
OFFICE....102 WASHINGTON STREET.

SIMON BROWN, EDITOR.

THOUGHTS SUGGESTED BY MAY.

OR all time, the charms of this lovely month have been the theme of the poets. But they sang of them in summer climes and milder regions, far from us, towards the rising sun. Our own poets have sung its charms with equal tenderness and zeal, but rather from the inspiration caught in reading the highly-wrought descriptions of others, we take it, than from any real existence of those charms, in *our* month of May. This month certainly has its days of calm and unsurpassed loveliness,—of balmy airs, brilliant suns, singing birds and opening flowers. The earth and the trees, and all animated things, reveal themselves anew, and put on a glory that is as fresh and beautiful as though we were beholding it for the first time. The brooks sing as well as the birds. The meadow is dotted with gay cowslips and the orchard is a mass of blossoms, making the farm fragrant with their delicate odors.

But May, in this climate, is fickle as well as April. We have mornings that are glorious, when the buds expand and promise opening flowers at once;—when whole troops of the red-winged blackbird visit the orchard and make the air vocal with their lively chatterings for half an hour, and then fly back to the low grounds to feed;—when the meadow-lark utters his piercing note from the highest twig of the big maple, just as he did last September. He seems to be the self-same bird, come back to the fields where he sung his morning song last year, and watched and waited upon his mate while she reared their tender brood. But lo, in the afternoon, the scene is changed! East winds come in from the adjacent sea filled with icicles, or something else as sharp, and pierce one to the bones with their benumbing power. Towards night this yields to the northwester. The temperature decreases. Swelling buds shrink back and are again enclosed in their firm outer coverings. Flowers contract their delicate petals and hide themselves from the coming cold in their hardy sheaths, and the next morning the grape blossoms and tender plants are drooping in the sun's rays, *pinched by frost!* Such is May. Boys and girls scour the woods on the day of its advent for the Trailing Arbutus, or some other bold and beautiful thing,—but ten chances to one, they go in thick boots, mittens and overcoats, and return with the mere exercise of their tramp for their pains! But they have had their walk and social intercourse, and will be all the better for it, and have found plenty of opportunity to *imagine* what they *could not really find* developed in the floral kingdom.

The keen and delightful sensations that animate most of us in this month spring, in a great degree, from the contrast afforded by the extremes of temperature, and the general atmospheric condition. The grass has put forth its tender leaves in every sunny place, and decorates the earth with its bright green, so wide in contrast with the snow, and so pleasant to the eye. Warm rains fall and refresh it, so that it rapidly spreads and covers deformities made by the frost. New voices are heard, not only from the returning buds, but from bleating sheep and lowing kine,—voices showing a tender attachment for the young which

they have recently ushered into the world. Cocks crow and hens cackle with unusual zeal, doves coo, turkeys strut, and the guinea hen screams, so that the whole farmery is checkered with new sights and made vocal with new sounds.

If March were less turbulent, and April less fickle, giving us a succession of gentle airs and sunny days, there would be a sameness in the weather of May that would be monotonous and tiresome, and we should long for high winds, snow squalls and pelting showers. We realize our delightful sensations by contrast. A sea captain waited at the mouth of the river Neva for the ice to break and pass out, so that he could go up to the city of St. Petersburg, the capital of the Russian empire, and discharge his ship. When the time arrived he did go up, unloaded, took in another cargo, went to a distant port, and in *six weeks* was back again to St. Petersburg. The change which nature had wrought in that brief period he described as astonishing, as bordering upon the marvellous! And it was marvellous! As he ascended the river, flowers greeted his eye all along its banks, and their fragrance was wafted by gentle airs far over the peaceful waters. Instead of the white shroud that covered the earth so short a time before, fields of clover blossoms, stout timothy, or the silky red-top, now waved in the wind, or was falling by the mower's scythe. It was in the midst of the hay season, and the scene presented was lovely and animated in the extreme. The hardy sailors seemed inspired by this wide and wonderful contrast, and became poetical in expressing their admiration of the charming landscape presented to them.

In England, however, the climate is more temperate, and the changes must be more gradual; yet they have been sufficiently wide and sudden to produce in the minds of its poets some of the warmest commendations of the month of May.

We cannot apologize to the reader for giving this brief corner of our page to the month of May. It is not out of place, nor will it be without its practical influences to him who loves the ways of nature and studies her curious works.

Our application is this: If the farmer has made careful preparation for his summer work, and has trained his mind not to be *too anxious for to-morrow*, he will find great contentment and profit, even in the changeable month of MAY!

HAY CROP OF THE U. S.—The average hay crop of the United States is now about 20,000,000 tons, worth according to quality, from $5 to $25 a ton, averaging perhaps $10, which would give $200,000,000 as the annual value.

A FARMER'S eyes should become familiar with each nook and corner of the farm and farm buildings.

For the New England Farmer.

PAY YOUR DEBTS.

What a different world this would be if all men did their utmost to keep clear of debt! How much less of bad feeling, anger, hatred, sin and misery should we see in the world if men would promptly pay what they owe each other!

There is a large class in the community, who, I am happy to say, do strive to keep square with the world, who are really honest in heart; and there is also another class who are not troubled at all if their debts are not paid,—indeed, they seem to be troubled a great deal if they are obliged to pay them. There is also another class who would like to pay their debts, but who do not seem to have sufficient energy and perseverance to shake off the load with which they have allowed themselves to be encumbered. As there is not much hope for those who are already "head and ears" in debt, nor for those mean, detestable people who do not pay if they can help it, I will, in this article, address those who are just beginning in life, who are free from debt—farmers, mechanics and others, who mean to live an honest, industrious life.

1. Set this down as a rule to which you will strictly adhere when it is possible so to do—*pay as you go.* Many have begun in life with this rule for their motto, but have sadly failed in the observance of it. And why have they failed? Misfortune caused some to fail, but nine out of every ten failed because they were somewhat deficient in *stern, unflinching principle, and manly independence,* and because it sometimes requires considerable self-denial and much exertion to follow the above rule. But, my young friends, unless you should be afflicted with more sickness and disaster than commonly falls to the lot of every human being, you can pay as you go. Although you may not be able to follow all the new fashions, yet you can live comfortably, and can move about in society with a mind and conscience at ease; you can walk the streets, and enjoy the beauties of nature and art, without fearing to meet an old creditor whom you should have paid long ago. It may sometimes be good policy for a young farmer to buy a farm, partially, or even wholly on credit, provided he can derive an income from it sufficient to pay the interest on the debt and some of the principal each year; but if he cannot do this, or if he can only pay the interest, the sooner he sells the farm the better. It would be far better for him to work out as a common day laborer than to make a slave of himself all his life merely to pay somebody their interest money.

2. Never buy anything unless you need it; and not even then unless you can pay for it at the time, or *know* that you can very soon. One great reason why so many are in debt is because they buy things which they do not need; and this is often done for the sake of keeping up a fashionable appearance. The poor strive to keep pace with the rich in outside show, and they soon find themselves deeply in debt. How much more worthy of respect is the man who wears the coarsest cloth, drives a slow horse and rides in an old wagon, which have all been paid for, and are his own, than the man who dresses in the finest broadcloth, drives a splendid pair of horses, and rides in an elegant carriage, but who owes almost every

man he meets on the street. Allow me here to express my abhorrence of a certain law which is a blot upon our statute book, and a disgrace to the community. It is called the "chancery law." No matter how much a man owes, by paying a small sum to certain high officials, he is forever freed from his obligations to others! There might be a case, once in a great while, when such a law would be an advantage to both the debtor and creditor, but such cases are very rare. This law is productive of good only when it enables an honest man to commence business anew, and go on until he has made money enough to pay all his old creditors. On the other hand, what an opportunity it gives to dishonest men to run in debt as they can, and then defraud, cheat, *steal*, by by "going through chancery!" How many thousand times has this been done! And how many have been drawn into this whirlpool of temptation, and robbed their creditors, who, but for this infamous law, would have remained honest and kept out of debt!

3. Make the determination that if you have anything to do with interest money it shall be paid *into* your pocket instead of being paid out of it. Interest has often been paid on notes until added together the sum amounted to more than the principal. Now, this is a losing business with the debtor, unless the borrowed money is made to pay a greater per cent. than he pays for the use of it; but this the farmer or mechanic cannot do. This continual payment of interest money is what keeps so many hard working men poor. They have not sufficient skill or energy to pay any of the principal, and so the interest money takes away all the profit of the farm or shop. But in ninety-nine cases out of a hundred if they had started right at the commencement of business, they would not now be in such a miserable condition.

4. If you want to acquire property, enjoy life, and at the same time be the possessor of a clear conscience, be honest, industrious, and *pay your debts*. Perhaps you will not be able, at first, to live in as fine a style as some of your neighbors, but that is a mere trifle compared to being in debt, and living on the property of others.

And now, friends and readers, whoever you may be, if you follow the above directions and advice, and are blessed with the common share of health and prosperity, when the sun of life has reached its meridian glory, you will find yourselves in possession of an untroubled conscience, and enough of this world's goods to make your pathway easy and pleasant down the declivity of life.

S. L. WHITE.

Leominster, March, 1864.

KIDNEY-WORMS IN SWINE.—The presence of kidney-worms may generally be known by the animal appearing weak across the loins, and sometimes by a weakness in one or both hind legs. As soon as these symptoms appear, give the animal corn soaked in lye of wood ashes, or strong soap-suds; at the same time rub the loins with spirits of turpentine.

THE MANURE OF SHEEP is much more valuable than that of cattle; thirty-six pounds of the former being equal in value to one hundred pounds of the latter.

A PRAYER.

I ask not wealth, but power to take
And use the things I have aright:
Not years, but wisdom that shall make
My life a profit and delight.

I ask not that for me the plan
Of good and ill be set aside,
But that the common lot of man
Be nobly borne and glorified.

I know I may not always keep
My steps in places green and sweet,
Nor find the pathway of the deep
A path of safety for my feet.

But pray, that, when the tempest's breath
Shall fiercely sweep my way about,
I make not shipwreck of my faith
In the unbottomed sea of doubt.

And that, though it be mine to know
How hard the stoniest pillow seems,
Good angels still may come and go
On the bright ladder of my dreams.

I do not ask for love below—
That friends shall never be estranged;
But for the power of loving, so
My heart may keep its youth unchanged.

Youth, joy, wealth—Fate, I give thee these;
Leave faith and hope till life is passed;
And leave my heart's best impulses
Fresh and unfailing to the last.

For this I count, of all sweet things,
The sweetest out of heaven above;
And loving others surely brings
The fullest recompense of love.

Chambers' Journal.

BEST TIME FOR GRAFTING.

Early grafting, if properly done, is much more effective than late operations. Grafts set late may take with great certainty, but they never make much growth during the first season. Time seems to be required, after the graft is set, for the broken and bruised cells on the walls of the wound to heal and unite so as to allow free passage for the circulation of sap. Some pear grafts which I set in February of last season made a growth quite equal to the natural shoots on the other parts of the tree, and there was no trouble with sprouts or suckers, which in late grafting issue numerously and successively, owing, no doubt, to the difficulty above adverted to. For cherry, plum, and the grapevine, early grafting is a sine qua non.

There is a risk in grafting early, arising from the long exposure of the scion to the effects of drying wind in March and April, which so parch and contract it as to close it against the flow of sap. This can be prevented by using short scions, and by coating the entire scion, or at least the lower buds, with a film of wax or varnish. Grape grafts or others near the ground can be covered with a little hay, straw or paper, to retain moderate moisture, and prevent ill effect from the contracting effects of frost and expansion by warmth which might either cause cracks in the coating of wax or displace the scions. Particular care must be taken that every part of the wound—even the slightest mark—is covered by wax to prevent evaporation. Whip grafting is the easiest and neatest method. For early work, a temperature of 45 deg., with little or no wind, allows the operation to be performed with ease. Nothing but a small knife, and a roll of waxed strips wound

on a bit of wood a little larger than a lead pencil, is required, and this roll can be carried in a pocket for warmth or suspended from a button. Only a single spiral wrapping should be given, and it will then unwrap itself without attention as growth progresses, and without checking or choking it.—W. G. WARING, *in Country Gentleman.*

WHITEWASH OR LIME FOR SHINGLES.

MESSRS. EDITORS: Like Elihu of old, I will "*shew mine opinion.*" In 1844, having occasion to put up a blacksmith's shop, a building of all others exposed to fire and destruction of shingles, I took the precaution to prepare the sawed shingles with which the roof and walls were covered, in the following manner:

Having a large trough, I put into it a bushel of quicklime, half a bushel of refuse salt, and five or six pounds of potash, adding water to slack the lime and dissolve the vegetable alkali and the salt,—well knowing that pieces of an old lime pit, a soap barrel, or a pork tub were not the best kindling stuff, and having long since learned, while at the Vineyard Sound, that *hot salt water* whitewash would endure far longer than that made with fresh water,—absorbing moisture, striking into the wood and not peeling and washing off. I set the bundles of the shingles nearly to the bands, in the wash for two or more hours; then turned them end for end.

When laid on the roof and walls, they were brushed over twice with the liquid, and were brushed over at intervals of two or three years after. At the expiration of 11 years, (seven forges having been used,) a shingle had not been burnt, nor had a nail started. The shingles had become *anti-phlogistic*, and the acid from the coal and the atmosphere had been neutralized by the alkalies, so the nails remained entire. The shingles now appear about as sound as new. The whitened and hardened shingles in the wake of the chimney on any old house, so abundantly confirm this theory and support the practice, that he who runs or rides, may read, and go and do likewise.—JOHN MEARS, *in Boston Cultivator.*

RESPECT THE EARTH-WORM.

Farmers are generally aware that the earth-worm luxuriates in a rich soil, but they are not disposed to give him any credit for contributing to its fertility. But the Creator is wiser than they, and He gives the farmer efficient helpers under ground, who do Him good service, without pay in money or even in thanks. One of the foreign quarterlies gives an account of the labor done by this busy engineer:

The ground is almost alive with the common earth-worm. Wherever mold is turned up, there these sappers and miners are turned up with it; they are, indeed, nature's plowmen; they bore the stubborn soil in every direction, and render it pervious to air, rain and the fibres of plants. Without these auxiliaries, "the farmer," says Gilbert White, "would find that his land would become cold, hard-bound and sterile." The green mantle of vegetation which covers the earth is dependent upon the worms which burrow in the bowels of it. What conveys a more definite idea of the magnitude of their operations, they are perpetually replenishing the upper soil and covering with soft and fine material, a crust which before was close and ungenial. They swallow a quantity of earth with their food, and having extracted the nutriment, they eject the remainder at the outlet of their holes. This refuse forms the worm-casts, which are the annoyance of the gardener, who might be reconciled to them if he was aware that the depositors save him a hundred times more labor than they cause. Mr. Charles Darwin has shown that in thirteen years a field of pasture was covered to a depth of three inches and a half with the mold discharged from their intestines; and in another case, the layer that they had accumulated in eighty years was from twelve to fourteen inches thick. They therefore play a most important part in the economy of vegetation, and we see why they teem throughout the surface of the globe.

LIQUID GRAFTING WAX.

Mr. L'Homme-Lefort (or, as others spell the name, *Lhomme-Lefort*) invented, not many years ago, a grafting composition, which, when generally known, will no doubt supercede all others now in use, either for grafting purposes or for covering wounds of trees. It is very cheap, very easily prepared, and keeps, corked up in a bottle with a tolerable wide mouth, at least six months unaltered. It is laid on in as thin a coat as possible, by means of a flat piece of wood. Within a few days it will be as hard as a stone. In addition to all the advantages indicated above, it is not in the least affected by the severe cold of our winters; it never softens or cracks when exposed to atmoshperic action or changes. A single instance which came under my own observation, will suffice to show this clearly. In April last the bark of a double-flowering peach tree had been destroyed by some goats, several days before I noticed the mischief. There was hardly a place as far up as the goats had been able to reach, where any bark was left; the few remaining particles were in no connection whatever; the wounds were rough, and had already turned brown by an exposure long continued. Although I despaired of the possibility of saving the tree, yet I determined to try it by an application of the grafting wax of L'Homme-Lefort, which I had just purchased for the first time.

The result was surprising. The tree is as vigorous as ever, the wounds having healed over under the cover of the hardened grafting wax, which, after a lapse of so many months, sticks as firmly to the tree as if laid on a few days ago.

As long as the inventor kept the preparation secret, it was sold at very high prices. Even now, it is unknown to many; I feel induced, therefore, to give the recipe, as follows:

Melt one pound of common rosin over a gentle fire. Add to it an ounce of beef tallow, and stir it well. Take it from the fire, let it cool down a little, and then mix with it a tablespoonful of spirits of turpentine, and after that about seven ounces of very strong alcohol (95 per cent.) to be had at any druggist's store. The alcohol cools it down so rapidly that it will be necessary to put it again on the fire, stirring it constantly. Still the utmost care must be exercised to prevent the alcohol from getting inflamed. To avoid it the best way is to remove the vessel from the fire when the lump that may have been formed commences melting again. This must be continued

till the whole is a homogeneous mass similar to honey.

After a few day's exposure to the atmosphere in a thin coat, it assumes a whitish color, and becomes as hard as stone, being impervious to water and air.

The editor of the *Horticulturist* adds:—A good liquid grafting wax has long been a desideratum. We have seen the above as used by "Horticola," and are much pleased with it. It is better than the shellac preparation, and is much cheaper. It is an admirable preparation for covering wounds in trees.—*California Farmer.*

WHAT A GARDEN MAY BE.

Here let me outline, in brief, what a farmer's garden may be made, without other than home labor. A broad walk shall run down the middle of either square enclosure, or long parallelogram. A box edging on either side is of little cost, and contributes eminently to neatness; it will hold good for eight years, without too great encroachment, and, at that time, will sell to the nurserymen for more than enough to pay the cost of resetting. On either side of this walk, in a border of six feet wide, the farmer may plant his dwarf fruit, with grapes at intervals, to climb upon a home-made cedar trellis, that shall overarch and embower the walk. If he love an evening pipe in his garden, he may plant some simple seat under one or more of these leafy arbors.

At least one-half the garden, as I before suggested, he may easily arrange, to till,—spring and autumn,—with the plow; and whatever he places there in the way of tree and shrub, must be in lines parallel with the walk. On the other half, he will be subjected to no such limitations; there he will establish his perennials—his asparagus, his thyme, his sage, and parsley; his rhubarb, his gooseberries, strawberries and raspberries; and in an angle—hidden if he choose by a belt of shrubbery—he may have his hotbed and compost heap. Fork-culture, which all these crops demand, will admit of any arrangement he may prefer, and he may enliven the groupings, and win the good wife's favor, by here and there a little circlet of such old-fashioned flowers as tulips, yellow lilies and white, with roses of all shades.

Upon the other half he may make distribution of parts, by banding the various crops with border lines of China or Refugee beans; and he may split the whole crosswise, by a walk overarched with climbing Limas, or the London Horticultural—setting off the two ends with an abutment of Scarlet-runners, and a surbase of fiery Nasturtium.

There are also available and pretty devices for making the land do double duty. The border lines of China-beans, which will be ripened in early August, may have Swedes sown in their shadow in the first days of July, so that when the Chinas have fulfilled their mission, there shall be a new line of purple green in their place. The early radishes and salads may have their little circlets of cucumber pits, no way interfering with the first, and covering the ground when the first are done. The early Bassano beets will come away in time to leave space for the full flow of the melons that have been planted at intervals among them. The cauliflower will find grateful shade under the lines of sweet corn, and the newly-set winter cabbages, a temporary refuge from the sun, under shelter of the ripened peas. I do not make these suggestions at random, but as the results of actual and successful experience.

With such simple and orderly arrangement, involving no excessive labor, I think every farmer and country liver may take pleasure in his garden as an object of beauty;—making of it a little farm in miniature, with its coppices of dwarf trees, its hedge rows of currants and gooseberries, and its meadows of strawberries and thyme. From the very day on which, in spring, he sees the first faint, upheaving, tufted lines of green from his Dan O'Rourkes, to the day when the dangling Limas, and sprawling, bloody tomatoes are smitten by the frost, it offers a field of constant progress, and of successive triumphs. Line by line, and company by company, the army of green things takes position; the little flowery banners are flung to the wind; and lo! presently every soldier of them all—plundering only the earth and sunshine—is loaded with beauty.—*Ik Marvel.*

BEANS AS A FIELD CROP.

Good white beans have commanded a high price for more than two years past, and will undoubtedly continue to do so for more than a year to come. We have an abundance of New England soil suited to the crop. They are easily raised and are not especially subject to be destroyed by worms or flies. They are harvested and cleaned without difficulty, and when ready for market are in a compact form and can be transported to market with facility. Indeed, there is probably no neighborhood in the whole of New England, but the farmer may sell every bushel he can produce at his own door, and at a fairly compensating price.

In addition to their increased home consumption, in consequence of the high price of meats, our armies will need vast quantities, whether the war continues or not.

If peace should be declared to-morrow, we can see no reason why a large standing force can be dispensed with for many months, or perhaps, years to come. Beans will be wanted largely by this force, for in the whole class of edibles, no dish is more universally or more highly esteemed, than that of a meal of well-ripened, sound, properly cooked baked beans, with a suitable seasoner from the pork barrel!

There is aonther reason why a large crop of beans should be produced. The prospect is now encouraging, that before a twelvemonth passes, the number of sheep in the free States will be greatly multiplied. In order to secure the most profitable results in sheep culture, the animals require a variety of food, that which especially promotes the growth of the body, and that which is more particularly adapted to the growth of wool. Beans may be raised as profitably as corn, and on light lands where it would not be advisable to put corn, a fair crop of beans may be brought with the addition of a light manuring. We hope a

large number of our friends will try the bean crop this year, believing they will find their account in it.

The following relates the practice of the late Judge BUEL in cultivating this crop.

Beans as a Field Crop.

They are a valuable crop, and with good care are as profitable as a wheat crop. They leave the soil in good tilth. I cultivated the beans the last year in three different ways, viz: in hills, in drills and sowed broadcast. I need not describe the first, which is a well known process. I had an acre in drills, which was the best crop I ever saw. My management was this: On the acre of light ground, where the clover had been frozen out the preceding winter, I spread eight loads of long manure, and immedialety ploughed and harrowed the ground. Drills of furrows were then made with a light plow, at a distance of two and a half feet, and the beans thrown along the furrows about the 25th of May, by the hand, at the rate of at least a bushel on the acre. I then gauged a doubled mold-board plow, which was passed once between the rows, and was followed by a light one-horse roller, which flattened the ridges. The crop was twice twice cleaned of weeds by the hoe, but not earthed. The product was more than forty-eight bushels by actual measurement.

EFFECT OF SOIL ON GRAPES.

At a late meeting of the *Ohio Pomological Society*, most of the grapes exhibited as Isabellas were of the kind having large, compact bunches, and large, round berries, so unlike the old style of Isabellas that few persons could regard them as the same, and yet the testimony of a large number of the growers would seem to show that the change is only the result of soil, season and culture.

Mr. Bateham called attention to the remarkable difference among the specimens exhibited; he said his attention had first been called to this subject by witnessing similar exhibitions in this part of the State two or three years ago, and on calling the attention of fruit-growers to it, through the papers, he was informed that the large, round variety was not the Isabella, but should be called the *Aiken*. Since that time he had seen more of these grapes and the growers, but he is still unable to satisfy himself that there are two distinct varieties—and yet he admits that the difference in the specimens is greater than he has ever supposed could be produced by soil and culture.

Capt. Stewart said he had found in his vineyard great difference among Isabella vines, in the size, shape and time of ripening of the fruit, as affected by the soil and location; could cut some ten days earlier than others—thinks all the difference in the specimens exhibited, may be effects of soil, &c. Mr. Stores, of Painesville, expressed the same opinion.

Mr. Oviatt, of Richfield, Summit Co., said he had a vineyard partly on clay soil and part sandy loam; the vines all propagated from one source, by himself, and those growing on the sandy soil produce larger and more compact bunches, and larger and rounder berries, than those on the sand —difference like that exhibited in specimens here to-night, and at the Fair; hence he did not believe in the Aiken variety.

Dr. Taylor thought it would be found that the large round specimens grew on rich, sandy land, where the roots found plenty of food and moisture, and the vines not over-loaded with fruit. Dr. Kirtland had told him that last fall he found the large, round (Aiken) variety growing on his ground, where the vine stood near a *sewer*, while other vines of the same origin, on common soil, bore old-fashioned Isabellas.

For the New England Farmer.

NEW MODE OF CULTIVATING CORN.

FRIEND BROWN:—The practical farmer should always be ready to impart information to his brother workers. He should improve upon the old adage, "Live, and let live." He should not only "live, and let live," but should live, and help live. To help live he should make use of the agricultural papers to converse with his brethren of the plow. There should be a more general desire to "swap" information. That information should be of the genuine kind, founded upon his own practical experience. No live farmer in these days plods along in the old path, never turning to the right or left. If he attempts to, in these days of scarcity of labor, he will find himself in the background. Premising there may be now and then one of the readers of the *Farmer* who are ready to seize all the advantages that turn up to save labor, I propose to state, briefly, my method of raising corn for the past two years, and which I adopt as the best.

After my ground is well prepared by manuring, plowing and harrowing, I drill it one way with a small plow. Into this drill I put whatever of compost or manure is intended for the hill, and mix it thoroughly with the soil, with an instrument made by attaching two or three of Shore's harrow teeth to a joist four inches square and four feet long, with handles on one end and a hitching place at the other. After this operation the corn is strewn all along the drill, at the rate of four to six kernels to the foot. A plow is then used to cover the whole, in soil tolerably free from stones.

When the corn is up sufficiently to see the rows the same little plow is run on either side of it, turning a furrow from the corn. In a week or so a cultivator is run through and the soil is again levelled. When it gets up a little too big for the crows, and the worms have got their share, with a dexterous use of the hoe it is thinned to about eight inches and left standing in as straight a row as possible. When ten or twelve inches high the same little plow is used to turn a furrow against either side of the corn. With a little practice the weeds may be nearly all covered and destroyed. With my two years' experience I can confidently recommend this method to my brother farmers, especially to those who have light soils to manage. I have actually raised a good crop of corn, and not used the hoe at all, and at harvest, one could not find three bushels of weeds to the acre.

Weare, N. H., March 17, 1864. Z. BREED.

AN elk can run a mile and a half in two minutes; an antelope in a minute; the wild mule of Tartary has even greater speed than that.

SHEEP EATING EACH OTHER'S WOOL.

Some weeks since a correspondent inquired what the cause is of sheep pulling the wool from each other and eating it. Since that inquiry was made, we have found the following in the *Ohio Farmer*, the Editor of which paper gives much attention to the subject of sheep, and has probably given the true cause of this disease:

All the flock masters are more or less familiar with the practice of some sheep picking their wool during the fall, winter and spring. The sheep—mostly the fine and dense wooled variety—are led into this practice of picking themselves for the same reason that a person scratching himself, viz: to relieve an itching on the surface of the skin.

The precise cause of this itching is not entirely explained by the sheep veterinarians. During our visit to the sheep flocks of Licking Co., our attention was called to this matter by the appearance of some of the sheep of Mr. James Pittsford's flock. Mr. Pittsford says on close examination minute pustules may be discovered in the cuticle of the sheep, which pustules on pressure yield a particle of yellow pus or matter. We suggested the possibility of the presence of small animal parasites in the skin, but no person present had known of a microscopic examination to ascertain the fact.

As a cure for the eruptions on the skins of the sheep, which cause the itching, it was agreed on all hands that an application of mercurial ointment was the best. The ointment as it comes from the drug store is too strong, and should be mixed with five or six times its bulk of hog's lard, then take a little of this mixture on the fore finger of the right hand, part the wool and rub it on carefully. The precise spots to be rubbed can be ascertained by a slight roughness of the skin, and also by noticing where the wool has been picked. We have heard of sheep dying from the effects of mercurial ointment rubbed on as strong as it comes from the shop, but by weakening it in lard, the application is perfectly safe.

For the New England Farmer.

THE ADVANTAGE OF LARGE CORPORATIONS.

MESSRS. EDITORS:—Large combinations have the advantage over smaller ones in many respects; "Where there is strength there is safety." Small combinations are liable to impositions of various kinds. Inferiority always labors under disadvantages. Among men, and other animals, the more powerful commands respect. Even the little dog yields deference to the greater one. Small combinations or corporations labor under many disadvantages, whether in shape of parishes, towns, States, or kingdoms. The small parish of a hundred, or the small town of five hundred inhabitants, requires about the same number of officers and the same amount of expense in conducting its business, that parishes and towns consisting of thousands would. The smaller the combination or corporation, the heavier the burden upon its constituents. Small combinations, by their weakness, are like the smaller animals, liable to become a prey to the more powerful ones. A small State or kingdom is watched like the unfortunate bird under the vigilance of the soaring vulture, ready to pounce upon it at any moment his voracity dictates.

The larger Powers look with an evil eye upon the smaller ones till an opportunity offers for making the coveted grab with the least danger to the aggressor of the interference of some rival power. The small States of Europe have been "bones of contention" to the covetous rulers of the larger piratical States. It is to me one of the mysteries of nature how a few designing, ambitious men can involve the governments of all sizes, from a parish church up to republics, kingdoms, and even empires, in quarrels and bloody, desolating wars. If these demagogues are accountable for the "deeds done in the body," and to be "rewarded according to their works," the judgment seat would not be the most attractive place for such culprits. The propensity in a tyrant to rule is so strong in life, that the passion, "strong in death," extends into the spirit world. Heaven is no place for tyrants, if they are subjected to a higher power; they seem to be as troublesome there as they have been on earth. If they can steal their way into heaven, they breed war there, and get cast down to earth again to afflict mankind. We read in the book of Revelation, that there was war in heaven; that Michael and his angels fought against the dragon and his angels, which proves that wherever tyrants covet power, that even heaven, earth, or hell are alike pregnable to their ambitious designs and encroachments. And we further read, that the dragon and his angels were cast out of heaven and lit upon the earth, probably to afflict and torment the lovers of peace, "seeking whom they may devour." Sections of kingdoms and communities forced into existence, as corporate bodies, by ambitious aspirants for offices, stand in need of protection by standing armies, much more than large combinations cemented by mutual agreement, as was the case of the United States.

When individual States think it a privilege, and petition to be admitted into large combinations of other confederated States, they come into a voluntary league with the confederacy for protection against the assaults of foreign and domestic foes, at the same time adding more power and strength to the combination of which they become members. Wisdom's ways are the ways of safety. Combinations of this kind command the respect, if not the love, of enemies; and the aspect of a large, well-united people, by its forbidding appearance, is a greater safeguard to a nation than a standing army. Small nations stand most in need of standing armies. Subjugated States or nations do not harmonize and assimilate with their conquerors so readily as those States do which are admitted by petition to join a larger combination.

The farming population of the United States constitute the strongest spoke in the wheel of government. In the present sad condition of our country, we must depend upon them, mainly, for the salvation of our Union. Our supplies for building materials, food and clothing, beside the backbone of our unparelleled armies, are derived from that class of our citizens; much of our trust is in their combined strength, for the safe termination of the existing calamitous war.

North Wilmington, 1864. SILAS BROWN.

TURBAN, OR TURK'S HEAD SQUASH.

Every lover of a good squash will feel indebted to Mr. GREGORY for the persistent interest he has so long taken in securing and propagating this wholesome vegetable. With the above engraving, he has sent us an account of the *Turban, or Turk's Head Squash.* Some time last fall, or winter, he sent us one-half of two different squashes of this variety, one of which we took home, had it cooked, and the whole family upon eating it, pronounced it *excellent*—they did not know *how any squash could be better.* It was dry, fine grained, and quite sweet enough for an article of food. We had no opportunity to test it made into pies, but others who have had, think no other squash is superior to it. Mr. G. says:

The above engraving gives this new French squash with the extreme development of the prominence called "Acorn" at the calyx end. The Acorn varies from this extreme size down to a merely rudimentary form, these two extremes being sometimes found on squashes growing on the same vine.

Some of my friends have complained that the Hubbard was too dry a squash in the fall to be acceptable for table use. Since I introduced the Hubbard as the best of all *winter* squashes, I have been seeking for the public a first class squash for *fall* use, that should add flavor to fineness and dryness of grain. After spending six years in carefully testing new varieties, I am satisfied that the Turban is *decidedly the best of all varieties for fall use.* The Turban is dry, very fine grained, and rich flavored, and in thickness of the flesh, and specific gravity excels all other squashes, being bulk for bulk about one-fifth heavier than the Hubbard, and one-fourth heavier than the Marrow Squash.

While the Hubbard does not usually acquire its maximum of sweetness and flavor until early winter, the Turban is a sweet, dry, fine grained and rich flavored squash when first gathered from the vine, and remains thus through the fall, excellent either for the table or pies.

The Turban grows to a good size for family use, averaging in weight about seven pounds, and under high cultivation yields at the rate of six tons to the acre, at which rate it yielded with me during the past season.

Directions for Cultivating.

Select good, warm soil, fill it well with manure, then mark off the hills 8 x 9, mix in some fine, stimulating manure in each hill (such as superphosphate or guano,) and plant early in the season four seed. When the runners begin to show themselves, thin to two or even one plant to the hill, keep down the weeds and loosen the soil between the hills, frequently with the cultivator. If you wish to store the squashes, allow them to remain on till the vines are dead, then gather and store after two or three days exposure to the sun. Avoid piling them in the field, and do not expose them to cold rains after gathering; this hurts the keeping qualities of any squash. In storing do not stand them with the "Acorn" downwards.

LICE ON CATTLE.

Mr. Harris Lewis, an excellent dairy farmer, of Herkimer county, thinks that a man who winters a good, thriving stock of lice, on say forty head of cattle, does so at an expense of about $200. He informs the *Country Gentleman* of a remedy which has proved cheap, safe and effective with him, and which should be borne in mind by stock farmers for future use—viz: He rubs a small quantity of unguentum (mercurial ointment) *on the stanchions* in his stables, for a distance, of perhaps two feet, up and down, covering the edges which the cattle come in contact with. As this does not kill the nits, the operation is repeated at intervals of eight days, three times, by the end of which period they will all be pretty certainly hatched out and destroyed. A fourth application may be required, but he finds three almost invariably enough. A small qrantity only is required, a very light coating serving the purpose, and by this method of application the cattle cannot get at it with their mouths, or otherwise receive any iujury from it.

Another point in Mr. L.'s management worthy of note is this: He keeps salt in tubs in his cattle yards constantly accessible to the stock, with which is mixed *sulphur*, in the proportion of about a tablespoonful to a quart of salt. This practice was begun some years ago, as a precaution against the murrain, for which purpose it was found effective, and it has been continued from the favorable influences it exerts upon the general health of the cows. Since its use, Mr. L. has had but a single case of *garget* in his herd, and he ascribes this exemption from that very troublesome difficulty among dairy farmers, solely to the use of sulphur.—*Country Gentleman.*

REMARKS.—We recently sent to New York for *Dodge's Infallible Exterminator*, and are now testing it on a stock of cattle, and will let the reader know the result.

☞ The town of Hatfield, in this State, raised 675 acres of tobacco last year, the product of which at 30 cents per pound—less than the average price for that which has been sold—would bring $325,000. This gives $250 to every inhabitant of the town. It is also related of a farmer of the same town that he has received $18,000 for the product of his farm the last year, $14,000 of which is clear profit. He raised 600 bushels of corn from twelve acres, and on twenty-five acres twenty-one and a half tons of tobacco, which sold for thirty-two cents per pound.

FARM ECONOMY.

The term *Farm Economy* is often used by agricultural writers, and, in its broad sense, means the *economical* management of any items of farm work, arrangement, or plans. The word *Farm* has several significations; it is derived from the Saxon word *farma*, meaning food, hospitality, or goods. In England, the signification of *farm* is land leased on rent. With us, its common meaning is a portion of land, consisting usually of grass land, meadow, pasture, tillage and woodland, cultivated or controlled by one person.

The word *Economy*, has, also, several meanings. It is derived from two or three Greek words, meaning *house—law—rule*. Other writers—beside agricultural—use it as a common and expressive term. The judicious and frugal management of public affairs, is called *political economy*.

In the sense in which we intend to consider the subject at this time, we suppose "Economy includes a *prudent management of all the means by which property is saved or accumulated; a judicious application of time, of labor, and of the instruments of labor.*"

In commencing a farm, it would be poor economy to arrange the *buildings* so as to impose a heavy and unnecessary tax upon the owner, by placing them at too great distances from each other, or by so arranging them as to have one branch remote from another of a kindred nature, where they are to be visited daily or hourly through a lifetime. The buildings should be as compact as they can be, without obstructing light and air —these being indispensable to the preservation of health. The objections often raised against such compactness, viz., odors and the danger of conflagration, must be obviated by skill in composting, and care in the use of fire. The loss in an *extra* and unnecessary travel of *six rods* each way, each time of going to the barn, in the average length of a farmer's life, say 40 years, going and returning 10 times each 24 hours, would be 5,475 miles. Nearly 137 miles annually. The estimate of visiting ten times is not too large, as in most cases the barn is visited by more than one person each day.

A rigid economy should, also, be observed in the arrangement of all the other buildings of the farm, such as sheds, carriage-house, piggery, woodhouse and corn-barn. These remarks apply especially to those constructing new buildings. Coming into possession of old ones, the proprietor must rearrange according to circumstances, but the whole matter should be reduced to a *plan*, and then a shed may be brought into place this year, the barn the next, and others follow in succession. But *without the plan* to start with, confusion would be likely to attend all efforts at improvements in this particular.

Another point in regard to farm buildings—and one heretofore greatly overlooked—is the want of *Shelter* for them. If they stand out in a bleak and dreary landscape, they are seriously affected by the elements that must always work upon them, namely, the sun, wind, rain, frost, hail and snow. The effect of the sun upon woodwork,—where its rays are not softened by a screen of some kind, is often quite destructive. The shingles on most of our roofs show it, and the warping of outer boarding and of clapboards, may be traced to the same cause. It frequently checks or splits outside work to a serious extent, so as greatly to increase the cost of painting. In an unprotected house, the wind is pressed through every opening, bringing cold and dampness, and makes an additional cost to keep the rooms comfortably warm. And where the winds have free access, the rain and hail are driven furiously against the work, very perceptibly wearing it away. It is estimated by those who have given attention to the subject, that good shingles, as a general thing, would scarcely be *worn* away in fifty years, provided they could be kept precisely in place all the time,—while under the combined action of the sun, wind and rain, and the swelling, shrinking and warping occasioned by them, they hardly last one-third of that time! This *wear* would be greatly modified, if buildings were partially protected by the presence of trees in their vicinity. A friend writes us that it costs nearly double to keep an unsheltered house painted, that it does one that is sheltered. The power of the winds causes rain, hail and sleet to batter with great force upon an unsheltered house, and whether it be painted or not, does far more damage to it than if surrounded by houses as in a city, or well protected by trees as in the country." A careful observer of this matter states "that it requires from *five to ten per cent. of the original cost of a house, once in five or six years, to paint it.*"

All this action of the elements may be greatly modified,—the cash value of the farm at the same time increased,—the expenses of housekeeping lessened, and the health of the family materially promoted, by planting groups of shade trees about our farm buildings. It requires but a narrow belt of evergreens to form a complete barrier against the wind. The hemlock is an admirable tree for this purpose, producing, when in the open air, numerous branches, from its base upward, densely filled with foliage. A breadth of ten feet set with that tree, or with the Norway spruce alternating, effectually shuts out the winds. The white pine, also, so common among us, is hardy, easily removed, and is as graceful and handsome as the hemlock or spruce. These evergreens are not

valuable merely for their beauty of form, or the protection which they afford, but for the soothing sounds that come from them on a summer night, like the coming and retreating waves on a far-off sea-shore,—or the grander march of winter winds through their branches, swelling into sublime anthems of atmospheric power. If they are interspersed with the rock maple, the graceful white, or canoe birch, the moose wood, or sumac, the effect will be still more pleasing.

They must not be too near, to shut out the vivifying rays of the sun, and make a damp atmosphere,—nor so far off as to allow a reunion of the wind to rush with full force upon the roof and sides of the buildings. On the north, 20 or 30 feet may not be too near; on the east, 50 or 60; on the west, 60 to 80, and never so near as to allow the branches to overhang the roofs. The south should be left open. This aspect has few high winds, and the windows looking out upon it may be sufficiently protected from summer suns by a few climbing plants, such as the *Prairie Queen Baltimore Belle Roses*, the *Scarlet, Yellow Monthly*, or the *Red* or *White Wistarian Honeysuckle, Chinese Tartaria*, or the common *Woodbine, Scarlet Trumpet Flower, Ivy*, or *Sweet Scented Virgin's Bower*.

From the foot of these, whenever it is possible, there should be a green, well kept lawn, as extensive as can be made convenient, and leaving all open to the sweet influences of the south. This lawn, once well prepared, will not only be a charming object in itself, but will prove one of the most profitable mowing lots on the farm, and especially so where the soiling system has been introduced. But by all means have the lawn, where the children can roll, and you can always see green grass—excepting when the ground is covered with snow—even though its limits be of the narrowest kind.

In another article we intend to consider the same subject in several other particulars.

NEW BOOKS.

THE CHRONICLE OF A GARDEN: Its Pets and its Pleasures. By the late Miss HENRIETTA WILSON. With a brief Memoir by James Hamilton. New York: Robert Carter & Brothers. For sale by Gould & Lincoln, Washington St., Boston.

This is one of the most beautiful books, both in matter and manner, that we have ever seen. It does not speak of the Garden at any considerable length, as a whole, or dwell long upon any one special topic, but glides pleasantly along, holding up a charming flower and calling attention to its fragrance and its beauty, or directing us to some sweet singing bird that has its home and rears its young among blossoms and sweet scented shrubs. It is full of feeling and just views of life and human duty, and strives everywhere to imbue the reader with sweet affections. All this is done, too, while quietly giving directions how to plant, and sow, and cultivate and care for the interesting things of the garden. It is, really, "a chronicle of the garden." She says,—"The profit of innocent pleasure is as real, and as beneficial to the mind, as the profit of gain to the purse."

Some of the topics discussed are, The pleasures of Work; Trees, Evergreens and Shrubs; and then the four seasons. It is a charming book for a present to young persons. The illustrations are in the highest style of the art.

ELEMENTS OF CHEMISTRY: Theoretical and Practical. By WILLIAM ALLEN MILLER, M. D., L.L. D. Chemical Physics, and Part II., Electricity and Magnetism. From the Third London Edition. New York: John Wiley, 535 Broadway, 1864. For sale by A. Williams & Co., 100 Washington St., Boston.

This is a book for the student or practical chemist. The unlearned reader would find little to interest him in it. It is printed well and numerously illustrated. Every book that is worth making should have a correct index, but this has neither index or table of contents. Its value is greatly depreciated on this account.

EXTRACTS AND REPLIES.

Pear and Peach Trees---Flax.

I would like to hear through your paper when is the best time to transplant or set out pear and peach trees, what soil is best adapted to them, and what is the best kind for family use?

When is the best time to sow flax, where can the seed be procured, and what soil is best adapted to its growth? A. N. C.

Ashfield, 1864.

REMARKS.—The spring is a good time to set pear trees, and the *best* time to set peach trees. Most pear trees require a deep, rich loam, drained, so that water will not stand long in the subsoil. Peach trees do better on a lighter soil—one that is more porous and dry. They do not need so rich a soil as pear trees. For a July pear, take the *Bloodgood*; for August, the *Rostiezer*, the *Bartlett* and *Flemish Beauty*; for September and October the *Seckel* is one of the highest flavored pears we have, and will last through October and November with careful keeping. The *Beurre Diel* and *Duchesse*, still later.

Among the peaches, the *Crawford Early* and *Late* are excellent, and so are the *Royal George, Morris' Early White, Bergen's Yellow, Noblesse* and *Early York*. There are others, perhaps, of equal merit.

Errata.

In my correspondence on Seeding Land to Grass, (*N. E. Farmer, Vol. XIX. No.* 10,) for the sentence "We would be hard to demonstrate," read, we think would be hard to demonstrate. For the sentence enclosed with a parenthesis, thus, ('Unless there is some other way to account for the nonappearance of the grass among the oats other than the great amount of loam, which every body says is the cause,") for the word "loam," read leaves; that is, leaves on the oats, more than there is on the rye, and consequently shades the ground more than the rye does. J. F.

One Fact about Feeding Horses.

I commenced this winter to feed a pair of horses on dry feed instead of wet. I find the result quite contrary to my expectations. They drink less water, sweat very much less, consequently are not as subject to colds. Stable keepers who are feeding dry feed for the second and third winters, find the same effects,

and explain it in this wise: In cold weather wet feed freezes before the animal has time to eat it, consequently it lies cold in the stomach, creates a slight fever, causes thirst which, being gratified, induces perspiration when the horse is put to work. I believe it is generally known that very cold water, instead of quenching thirst, aggravates it.

I would like to have the feed of all stock steamed in winter and fed out slightly warm, in a warm barn, but I am thoroughly convinced of the error we have all been in while feeding *wet* feed in winter, in a cold stable. A. W. C.

Sheldonville, March, 1864.

Cogswell's Wheel Revolving Rake.

Can you, or any of your subscribers give me any information in regard to *Cogswell's Wheel Revolving Rake?*

REMARKS.—We cannot. Who will?

For the New England Farmer.

REMINISCENCES OF CHESHIRE.

At the beginning of the present century, the town of Cheshire, Berkshire County, Mass., was noted for several things that deeply interested its inhabitants, in those days of stirring events, and an account of them, after sixty years have passed away, may be interesting to the descendants of that peculiar people and the community generally.

Cheshire was brought into great notoriety by being the place of residence of Elder John Leland, a very noted preacher. He was a man of strong mind, excellent common sense, of marked ability, and very eccentric. He was in the habit of illustrating his points by an anecdote which was always forcible, and he could make his auditors laugh or weep at his will. He became noted as a preacher and drew full houses wherever he went. While quite young he commenced preaching in Virginia, and became acquainted with Thos. Jefferson, Patrick Henry, and many of the leading men of that State. The Elder was once asked why he was so singular in his illustrations, and why he told so many stories in the pulpit. He answered that when he first commenced preaching in Virginia the young men would gather together, in the large pews in the corners of the church, and commence playing cards, and after trying many expedients to get their attention, and failing, he commenced telling stories by way of application, and met with complete success. The Elder was a very sedate man—never was known to change his countenance when telling one of his most exciting stories, while his audience were weeping or laughing. He has been heard to say that he remembered smiling but once while preaching, and that was in Virginia. It was a very warm Sabbath day. The church was situated on a large green, and the front door, which was directly opposite the pulpit, was thrown open. "I saw," said he, "a man come staggering along and take a seat on the steps directly in front of me. He soon fell asleep and commenced nodding. A large goat, which was feeding on the green, took it as a challenge, drew back, and prepared himself; then, coming up with great force, he struck the poor man in the head and knocked him almost into the church. I then had to stop, for it broke the thread of my argument, and I could but smile, while I was recovering my equilibrium, and the poor drunkard was scrambling out of the way of his antagonist."

Elder Leland came North and settled in Cheshire, and his people became very much attached to him. His intimacy with Thomas Jefferson caused him to imbibe strong Jeffersonian political principles, which he instilled into the minds of his people with as much fervor as he did the doctrines of the Gospel. The consequence was that the people of Cheshire became decided Jeffersonian Democrats; and so tenacious were they, that the enmity between them and the Federals was as marked as was that of the Jews and Samaritans. For more than fifty years they held the sway, and most of the time there were not more than one or two dissenters that dared presume to get a livelihood within their precincts.

Nearly every family took the Pittsfield *Sun*, (a very well conducted Democratic paper.) On its arrival the family were called together, and one of them read it through aloud, remarks being made by a venerable sire, or some one of the group; it was then folded up carefully, placed upon the shelf with the Bible, and it became an open matter of discussion, which in reality was the most benefit to mankind—the Bible or the bright luminary from Pittsfield? and with some of the older members it is a bone of contention to this day. Elder Leland was often called upon to deliver an oration on the 4th of July, which he always entered into with the spirit of '76. He was a particular friend of Martin Van Buren, who often visited him at his humble dwelling after he became old and infirm. When he was President of the United States he appointed Elder Leland one of the committee to visit West Point military academy, which he did to his own gratification and that of those who were associated with him.

The people of Cheshire were noted for making cheese, as also were their ancestors in Cheshire, Conn., and theirs in Cheshire, England.

When Thomas Jefferson was nominated as candidate for the Presidency, some now living may remember what an uprising was occasioned among the old Puritan Fathers by the report that he was an Infidel. Divines preached from their pulpits every Sabbath during the campaign with all the eloquence of pleading, believing if he was elected President of the United States all their Bibles, hymn-books and sermons would be burned, and the altars of New England torn down and demolished. It was then that the old man eloquent (Leland) arose in his strength and defended his old Virginian friend, the champion of Liberty, with almost supernatural power. Cheshire to a man followed its inflexible leader, and the aged men to this day cherish the memory of Jefferson and Leland as inseparable.

The town of Cheshire, wishing to make a demonstration of their attachment to the successful President, who had overcome the opposition of his opponents, and was the triumphant champion of American Liberty, *resolved* to put their curds together and make a mammoth cheese; and further, *resolved*, that Elder John Leland should take the said cheese to Washington, and present the same, with all due ceremony, to our most illustrious President, Thomas Jefferson.

The day was announced from the pulpit on which the curds should be brought together, at Capt. Brown's cider mill. A conscription was laid upon every cow within the precincts of the town, with the exception of Federal cows, if by chance there should be any found, and great can-

tion must be taken to ascertain this important fact, for a very little of that *leaven* would create such a fermentation as to endanger the whole vast curd, and our noble enterprise be thwarted.

All things were made ready, a vast hoop being prepared, which was placed under the ponderous beam and screws. The day arrived for the grand ceremonies. It was a proud day for Cheshire. The sun rose up from Old Ocean to usher it in with unusual splendor. The golden tinge upon the mountains never looked so golden. The gentle breezes that whispered through the valley were laden with sweet incense from the blooming flowers of the hill sides, and the sweet tones of the church bell echoed through the valley and among the mountain tops, cheering them on their march with their precious treasure to the cider mill.

The men and boys put on their Sunday clothes; the rosy-cheeked damsels their best white aprons; married ladies dressed with the last pattern of chintz calico, with a vandyke over their shoulders. Old conveyances were put in requisition, some were on horseback, some in wagons, and some in carts drawn by oxen. They poured from every road and cross road, the grand cavalcade moving with the imposing dignity inspired by the occasion. As the parties from the different neighborhoods arrived at the cider mill, a committee, chosen for the purpose, met the contributors with due congratulations, and conducted them to the place of deposit—the great hoop. After the last contributor had arrived, a committee of ladies undertook the task of a proper admixture of this before unknown quantity of curd. It was soon prepared; the ponderous beam and screw were applied, and the whey run merrily. The ceremonies were appropriate and imposing, the beloved Elder dedicating the cheese to their honored friend, Thomas Jefferson, President of the United States. Then a suitable hymn was sung to the tune of Mear, (being lined off by the Elder) with stirring effect. The congregation were dismissed with a benediction, and dispersed, considering it the greatest day in the history of Cheshire.

When completed, the cheese, weighing 1600 pounds, was loaded on to a sleigh, and Elder John Leland, well seated with reins in hand, started for the capital of the United States.

On his arrival at the White House, with due formality the cheese was presented to President Jefferson, with an appropriate speech, setting forth the loyalty of the people of his charge; how they had fought against the cowardly slanders of the Puritans, and how they gloried in his triumph. He presented as a token of their respect an article of their own manufacture, in which every family and cow in the town of Cheshire participated. In response, the honored President returned his warmest thanks, duly appreciating this wonderful gift as coming from the very heart of his people, which he received as a token of his fidelity in the great cause of equal rights to all men. "I will cause this auspicious event," said he, "to be placed upon the record of our nation, and it will ever shine amid its glorious archives. I shall ever esteem it among the most happy incidents of my life. And now, my much respected Rev. friend, I will, by the consent and in the presence of my most honored Council, have this cheese cut, and you will take back with you a portion of it, and present it to your people (that they may all have a taste), with my most hearty thanks. Tell them never to falter in the principles they have so nobly defended. They have successfully come to the rescue of our beloved country in the time of her great peril. I wish them health and prosperity, and may milk in great abundance never cease to flow, to the latest posterity."

Then came in the steward of the President with glittering knife, and the cheese was cut in the presence of the President, and the heads of the departments, foreign ministers, and many other men and women of notoriety. It was of a beautiful annotto color, a little variegated in its appearance, owing to the great variety of curds composing it, which added to the beauty of the scene. Very soon the cheese, with bread accompanying it, was passed around, commencing with the President, then the Elder, the heads of departments, and thus in order until all were fed. It was highly admired and complimented for its good flavor, richness and color, and was considered the most perfect specimen of cheese ever exhibited at the White House. Then the honored company were formally introduced to the distinguished Elder, wishing him happiness and prosperity; and not only him, but the beloved people of his charge. "Tell them we have never partaken of so good cheese before in our day." The company dispersed, rejoicing that they had been honored with the privilege of once more feasting to their full satisfaction upon bread and cheese, which so forcibly reminded them of the golden days of their childhood.

The wonderful size of the cheese, and the ceremonies at the White House, were matters of notoriety throughout our whole country, as well as in foreign lands.

During the journey of the Rev. Elder home, a false report came to his ears, that the President in his remarks at the reception of the cheese said he himself was not very fond of cheese, but his negroes were. By diligent investigation it was found out that a very wicked man, failing to get a piece of the cheese (there being such a great demand for it), fabricated this awful disrespectful report. He was duly reprimanded.

As the Elder proceeded on his way, highly pleased with the success of his mission, he put up one night at a village inn, where he had stopped on his way to Washington. There was a Federal meeting there that evening, and a large collection of people were assembled. The news had arrived there, that when the President had the cheese cut it proved to be full of skippers, and they asked in a sarcastic manner what was the cause of so great a calamity. The Elder, with his usual gravity, responded, saying, "On that notable day, when the curds of my beloved parish were brought together for the purpose of making the largest cheese the world had ever beheld, an unfortunate occurrence took place. The curds were poured into the vast resorvoir—the great hoop—and while it was being stirred and mixed by a committee of women, chosen for that occasion, a Federal in disguise, taking great liberties, fell into the floating mass and came very near being drowned before he was rescued. It created great consternation at the time, and it is not to be wondered that the cheese was full of skippers and

vermin."

The Elder, after many days, arrived safe and sound. On a special occasion, he related to his dear people all the incidents of his long journey, the hearty reception he met with at the White House, presenting to them the thanks of the President and those in authority with him, and also the blessings they pronounced upon them and their cows to all future generations. The Elder then presented the large piece of cheese the President sent back to them, that they might partake of the bounties of their own productions, and rejoice in the great success which had crowned their labors.

About the time this mammoth cheese was made, there appeared in the Pittsfield *Sun* a description in verse of the scene which then transpired in Cheshire, said to have been written by Dr. Asa Burbank, of Lanesborough, which had a wide-spread circulation throughout this and foreign lands, to the admiration of all those who chanced to read them. They have been long forgotten. They are now reproduced from the memory of an old man, who learned them at the time. The following is a copy and no doubt nearly correct:

From meadows rich with clover red,
A thousand heifers come,
The tinkling bells, the tidings spread—
The milkmaid muffles up her head
And wakes the village hum.

In shining pans, the snowy flood
Through whitened canvass pours,
The dyeing pots of ottar good,
The rennet tinged with madder blood,
Are sought among our stores.

The quivering curd in panniers stowed,
Is loaded on the jade,
The stumbling beast supports the load,
While trickling whey bedews the road,
Along the dusty glade.

As Cairo's slaves to bondage bred,
Through arid deserts roam,
Through trackless sand undaunted tread,
With skins of water o'er their head,
To cheer their master home,

So here full many a sturdy swain
His precious luggage bore,
Old misers now forgot their gain,
And bed-rid cripples free from pain,
Now took the road before.

The widow with her dripping mite,
Upon the saddle horn,
Rode up in haste to view the sight,
And add a charity so right—
A pauper so forlorn.

The rabble then an opening drew,
Upon the verdant grass,
To let the vast procession through
To spread the rich repast in view,
And let John Leland pass.

Then Elder John with lifted eyes
In musing posture stood,
Invoked a blessing from the skies,
To save from vermin, mice and flies,
And keep the bounty good.

Now mellow strokes the yielding pile
From polished steel receives;
Ye shining nymphs stand still a while,
And mix the mass with salt and oil,
With sage and savory leaves.

The sexton, like the patriot troop,
With naked arms around,
Embraced with hardy hands the scoop
To fill the vast extended hoop,
While beetles smacked it down.

Next girding screw from ponderous beam,
With heft immense drew down,
The gushing whey from every seam,
Flowed through the streets a rapid stream,
And shad came up to town.

BERKSHIRE.

For the New England Farmer.

CUTTING FEED FOR HORSES.

MESSRS. EDITORS:—Noticing an inquiry a few weeks since in the *New England Farmer* in regard to cutting feed for horses. I would say that I have had fifteen years experience in that way of feeding, and have not thrown the straw cutter aside yet. That a working team will do much better on cut hay, with meal, than on whole hay, with oats, I have not the least doubt, and I think it will take about one-quarter less hay, and keep the team in better condition.

A horse that is feed on cut feed drinks very little water, (his hay, meal and water, all go together,) he wastes nothing, every thing is eat up clean. Horses that are fed on cut feed do not look hollow and gaunt, as horses sometimes do that are fed on whole hay and oats; they do not drink such excessive quantities of water and do not have to supply moisture to enable them to eat their feed, and they have more time for rest.

A horse that stands in the stable and is used only occasionally, I should prefer to let him cut his own feed. A horse that is worked every day will eat about three bushels of cut hay, with six quarts of corn-meal, in twenty-four hours, and keep in good condition. Any one will soon find how much a horse will eat; they need all they will eat, and eat clean, so that when you give them their feed their manger will be as clean as though it was brushed out. Corn and rye, ground fine, make good feed for a work horse, but for a young horse, I should prefer a greater portion of oat meal, or shorts, as clear corn or rye might tend to stiffen a young horse.

Hay may be cut on stormy days. It is a good plan to cut enough to last two or three weeks, whenever one has leisure. Some mix their feed in a box, but I prefer a light manger, throw in the cut hay and water, stir well, and then stir in the meal. Cut feed, mixed in the above way will not freeze in the coldest weather. It is a good plan in the coldest weather to take a pail of hot water from the house, and I think cut feed is better mixed with hot water at any time. Straw is often mixed with hay, and I do not know but horses do as well on this mixture as on clear hay. I should prefer good wheat straw, oat straw often makes a horse scour.

In regard to straw cutters, I should never buy one that cuts on a raw hide roller, as they are the most expensive machine to keep in repair, as the roller will last but two or three years, where the machine is much used, and it is more work to keep them in running order than any other machine I know anything about.

The above is my experience in feeding cut feed; it is the result of fifteen years' practice with a good straw cutter on hand, in good running order, and in constant use. A SUBSCRIBER.

Middlebury, Vt., March 5, 1864.

For the New England Farmer.

SEEDING LANDS TO GRASS.

MR. EDITOR:—Your correspondent, "J. F.," in your last paper, has some very good ideas in relation to seeding down land to grass, but there are some things he seems to have lost sight of. He arrives at the conclusion that it will not pay to sow grass seed separately, without some kind of grain, "taking into consideration the amount of land, expenses," &c.. Now this may apply to spring sowing, but in this vicinity there is a vast amount of land laid down to grass in the fall, say from August to last of September. We turn over the sward after taking off the grass crop, give it a liberal dressing of compost manure suited to the soil, harrow, sow the grass seed and roll the same; this buries the seed sufficiently, and you have a good crop generally the next season, without the loss of a crop, and without exhausting the soil with a grain crop; but this process is generally practiced on low meadow land, that is too moist for early spring cultivation with grain crops.

On our more elevated lands, our sandy or gravelly loams, we can more profitably cultivate our grain crops. Our grass lands need renovation—a rotation of crops—when they have lain to grass four or five years. Then turn over the sward in the spring (if silicious soil) just before you want to plant, cultivate with corn or potatoes one or two years. with a good dressing of manure, and lay down to grass with summer grain, as your correspondent suggests.

Now I can not agree with him that *all* lands for cultivation should be plowed in the fall. In my report to our county agricultural society some years ago, I said, "We have not unfrequently noticed, in our travels through the county, that some of our otherwise good farmers are in the habit of plowing their silicious, loamy lands in the fall, under the erroneous impression that the soil is benefited by exposure to the frosts of winter. On a soil of an opposite character, of an argillacous texture, where clay predominates, this mode of husbandry is beneficial. On these the frosts of winter have a tendency to render the soil more permeable and less compact; on the other hand, a sandy soil will retain its adhesiveness and be more retentive of moisture, if plowing is omitted till the season for planting arrives."

In my subsequent experience I have seen no cause for changing my opinions. C.

No. Pembroke, Mass., March, 1864.

PRODUCTION OF DOUBLE FLOWERS.

The question is often asked concerning the means by which double varieties of flowers are produced. The means by which such effects are produced are not very definite, and cannot be very precisely stated. We can only say in general terms, as we have already said, that they are produced by a long continuation of artificial appliances. As an example of the successive steps by which the wild Scotch Prickly Rose, or Burnet, *(Rosa spinosissima,)* was converted into a fine, full double rose, we will quote from the history of the rose, by Mr. Sabine:

"The first appearance," he says, "of the double Scotch roses, was in the nursery of Messrs. Dickson & Brown, of Perth. I am indebted to Mr. Robert Brown, one of the partners of the Firm, for the following account of their origin: In the year 1793, he and his brother transplanted some of the wild Scotch roses from the Hill of Vrimoul, in the neighborhood of Perth, into their nursery gardens. One of these bore flowers slightly tinged with red, from which a plant was raised, whose flowers exhibited a monstrosity, appearing as if one or two flowers came from one bud, which was a little tinged with red. These produced seed from which semi-double flowering plants were obtained; and by continuing a selection of seed, and thus raising new plants, they, in 1802 and 1803 had eight good, double varieties to dispose of, namely, the small white, the small yellow, the lady's blush, another lady's blush with small footstalks, the red, the light red, the dark marbled, and the large two-colored. Of these they subsequently increased the number; and from the stock in the Perth garden, the nurseries both of Scotland and England were first supplied."—*Magazine of Horticulture.*

FACTORY SPIDERS.

Lighting my candle before retiring to rest one night, I witnessed a marvelous scene upon the top of the flower-pot. When I first placed the very tiny spiders upon the lump of clay they very quickly disappeared, most of them taking possession of the mygalo's nest. During the day a few watchers and patrols alone were to be seen; but when the candle was suddenly lit at night, from thirty to forty of the spiders were seen busily engaged in weaving a tent, dome, awning, or canopy, from the rim of the flower-pot and over the lump of clay. The pinnacle of the dome was the broken wing of a dady-long-legs which I had put upon the top of the clay, fancying the spiders would eat it. The weavers were divided into parties of warpers and woofers, and were under the superintendence of overseers. On receiving a hint or touch from the uplifted fore-leg of an overseer, a woofer ran swiftly down from the pinnacle, laying threads from his spinnerets, and fastening them to the rim of the flower-pot, and then running quickly up again. The woofer thus lay down eight threads every time he descended and mounted up again. The moment the woofer reached the top a warper was started off from the opposite side of the pinnacle which he laid down by travelling over the circuit of a comparatively long crescent, or segment of a circle, which also descended down as far as the outer edge of the flower-pot. Thirty or forty tiny spiders, with white bodies and fawn-hued legs, busy weaving on factory or cooperative principles a dome of the finest silk, made up a scene never to be forgotten. It revealed what is called "instinct" in a new and startling form, for the faculty of cooperation under overseers, woofers, and warpers, is, as far as I can learn, a new fact in spider life. The projecting ends of grass roots and the like were skillfully used to keep the canopy about all round away from the clay. This fabric was seen, besides other persons, by two members of the Brighton and Sussex Natural History Society. It was so fine that the unassisted eye looking straight upon it could not see it, but when viewed at favorable angles both warp and woof were clearly discernable, and on very close inspection I discovered a few little holes. One of the Brighton naturalists who saw it says it resembled in shape "a scull cap;" and the other naturalist, although fresh from the

marvels of the International Exhibition, declared it to be the "most singular structure he ever saw." One day I put a fly upon the outside of the web, to ascertain what the functions of spiders which I have called watchers, and patrols really were; for there were three or four inside under the pinnacle, and as many outside, wandering about all day. The instant I put the fly upon the tent one of the patrols swiftly ran close up to it, and then, seeing the fly was, relatively to itself, a huge animal, ran away again.—*All the Year Round.*

For the New England Farmer.

THE DOUGLAS AXE MANUFACTURING COMPANY.

Half a century ago, Dea. OLIVER HUNT, an estimable citizen of East Douglas, pursued the humble calling of a blacksmith, occupying an ordinary looking shop, still standing on the principal street of the village. He was one of those hard-working, thinking men, of whom our free country has furnished innumerable instances, who, by constant attention to some ordinary operation, have finally brought out an article positively superior to all competition, and have achieved a name and a fortune for themselves, at the same time conferring an incalculable benefit upon the public.

While attending to the usual duties of a country blacksmith, mending chains and carts, shoeing horses, etc., he was frequently called upon to repair a neighbor's axe, and succeeding well at this, he soon brought out an axe of his manufacture, and offered it for sale. Henceforth the farmers relied upon Dea. Hunt for their axes, and he, being encouraged by his success, soon sent a barrel full of his axes to Providence for sale. Thus the business was gradually established, and being enlarged by his son, Dea. WARREN HUNT, the present agent, continued to prosper until about the year 1835, when the present company was incorporated.

The Company has a capital of $300,000 invested in the manufacture of axes and edge tools. It is not only the oldest but the largest establishment of its kind in the United States or the world. Its works, which are three in number, each comprising several shops, are situated on the Mumford river, which furnishes abundant water power. It uses 1200 tons of iron per annum, about one-half of which is imported, and the remainder obtained from Pembroke and other places in America. It also uses 250 tons of cast steel much of which is procured from the works at Fitchburg. Its forges consume 1800 tons of coal per annum.

To give a minute account of the various processes which the material is subject to before it arrives at the packing room a nicely burnished axe, would require considerable practical knowledge of the business, but the writer will endeavor simply to communicate some impressions which were conveyed to his mind by a hasty walk through the shops under the guidance of the obliging clerk of the Company, Mr. EDWIN MOORE, to whom he is indebted for much of the information communicated above.

There are four distinct processes in axe-making, namely, Forging, Grinding, Tempering, Polishing.

1. *Forging.*—The forging shops are the largest, and require a larger number of hands than either of the others. The first operation witnessed was cutting. A solid bar of iron, 10 or 15 feet in length, was brought in contact with a knife-looking instrument, operated in the same manner as the trip hammer, which cut the bar into pieces of appropriate length for medium sized axes with as much apparent ease as the sturdy farmer's wife slices up the remnant of cold pudding that remains after the Thanksgiving dinner, and with a rapidity that is truly astonishing.

The pattern is then placed in the furnace and steadily heated, after which it undergoes the process of rolling, by which the eye is formed and the pattern brought into such shape that a few strokes of the trip hammer and the perfecting of the eye by a hand instrument, brings it into form somewhat resembling an axe. The next workman into whose hands it passes, and who is the fifth operator upon it, completes the resemblance by inserting in its open jaws a piece of steel taken hot from the furnace, and constituting what is called the bit. Afterwards it is welded, and hammered, and smoothed, and after having been exposed to the power of a long row of hammers of different patterns, and having been in and out of the furnace repeatedly, it drops upon the floor at the opposite end of the room, looking full as much like a finished axe as the one on exhibition at the counting-room which Dea. Hunt hammered out at the blacksmith shop over forty years ago.

Each workman places certain marks upon the axe, by means of which any defect that may afterwards be discovered is easily traced back to its author in the forging room.

2. *Grinding* is an operation with which every one is more or less familiar and needs little explanation. The stones are of great size and revolve with great rapidity. The axe passes through the hands of four grinders, one grinding the face, another the sides, &c.

3. *Tempering.*—The axe is heated until cherry red and then plunged into strong brine, from which it is taken out as hard as glass and exposed to another fire, where it slowly reveals the changes it is undergoing by the varying colors which appear upon its surface. First appears a brazen hue, then a copper color, dark and light blue giving place to other beautiful hues, constantly varying, and indicating material changes in the temper of the axe. When the well-known color appears that indicates the right temper, it is plunged into a tub of cold water and the process ceases. This is an operation requiring a discriminating eye and a degree of skill to be attained only by constant practice.

4. *Polishing.*—Wooden wheels are spread over with a thin coating of glue and then covered with coarse emery for the first operation. These wheels are made to revolve rapidly and the axes applied to them in the same manner as to the grindstone. For the second operation called rolling, oil and emery are used, and for the last, which is called burnishing, very fine emery. Each workman polishes about one hundred axes per day. The goods are now taken to an upper room and marked with the name of the Company; the heads are painted, and after drying, are packed in boxes by dozens, some with handles, and some without, and sent to market.

Not less than twenty men have been employed

upon every axe before it reaches the packing room. Most of the operatives are paid by the piece, each room being under the charge of an inspector, who exercises a general supervision over the operations in his department. The process which has been described applies to common chopping axes.

Among the other implements manufactured may be mentioned adzes, hatchets, picks, mattocks, knives, &c. Also the Spanish axe, an odd pattern manufactured expressly for exportation to Spain; and the Spanish machetes, an implement used in Cuba for cutting wild cane and also for warfare. The latter are of various patterns, some of them not entirely unlike a long Yankee cleaver, with nice horn handles.

The Company manufactures nearly half a million dollars' worth of goods annually, for which their market is the world, orders being frequently received, not only from the various countries of Europe, but from Cuba, Australia, South America and Africa. VIATOR.

For the New England Farmer.

CUTTING FEED FOR STOCK.

I notice an article in the *Farmer* on the subject of "Cutting Feed for Stock," and that you invite others to give their views on this topic. Without pretending to any superior wisdom on this matter, I have become fully convinced in my own mind, after some years of experience, that the true course regarding this much discussed question in relation to stock feeding is, that it was *only* profitable to cut such fodder that the animal will not devour readily and savingly and digest thoroughly. All else is labor lost; and labor in these times is even more than money, we know by experience, as money will not always hire it.

For instance, I have a horse to winter, and have for his winter feed a certain quantity of ground feed and hay. A certain quantity of the hay he will consume daily and economically uncut, and likewise the meal. If he is not too much in years he will thoroughly masticate his hay, which fact can be determined by the excrements; and the meal, of course, he will obtain the full benefit of, as it is already ground. If his system requires the meal to be wet, this, of course, can as easily be done as though it were mixed with cut hay. And in passing, allow me just to say, that here is apt to be a mistake in regard to feeding uncut food—we are too likely to give it in a dry state, and thence arises constipation.

If any of the advocates of cutting feed will give me good, substantial reasons for cutting, under the above circumstances, that is, when it is economically eaten and well digested, I should be gratified to hear them. But on the contrary, there are numerous cases, I am confident, where, to cut feed, would be highly practicable,—for instance, where an aged animal has lost its power of mastication, or where fodder is in such a poor condition that it will not be eaten unless cut and meal added to it. Or, perhaps, in high feeding, where the animal will not partake of as much hay as is desirable, the amount may possibly be increased by cutting and adding meal to it. To meet these exigencies, every stock feeder should own a good feed-cutter.

But when writers tell us that *all* fodder, under *all* circumstances, should be cut before feeding, I for one feel that theory does not at times, at least, correspond with what practice teaches is best. W. J. PETTEE.

Salisbury, Conn.

SKIN DISEASES IN ANIMALS.

Scabies is a pestiferous disease, whether it affects the horse, the ox, the sheep, swine, or poultry, inflicting a loss not easily estimated; hence the maxim of every intelligent farmer is to avoid it. With him "prevention is better than cure," and therefore his grand desideratum is to guard against contagion. Sheep are, perhaps, more subject to it than any of the other animals, arising as much from the nature of their skins and coats as from the fecundity of the *acarus ovis*, and the greater vicissitudes of the weather to which they (sheep) are exposed. Certain parts of the body are more liable to be affected than others; and so is an unhealthy skin than a healthy one. Indeed, it has been said that an unhealthy skin will itself produce *scabies*(?), but this conclusion does not appear to be well founded, for a disease dependent upon the presence of living parasites, can never arise spontaneously, but must be effected by contagion, either by means of their eggs, or the insect in some other stage of its existence.

Now from what has just been said, it will appear obvious that cleanliness, a healthy skin and state of the body, and a separation from foul animals and ground, are the means necessary to avoid contagion.—*American Veterinary Journal.*

TREATMENT OF CROUP.—*Hall's Journal of Health* says: Croup is an inflammation of the inner surface of the windpipe. Inflammation implies heat, and that heat must be subdued, or the patient will inevitably die. If prompt efforts are made to cool the parts in case of an attack of croup, relief will be as prompt it is surprising and delightful. All know that cold applied to a hot skin cools it, but all do not as well know and understand that hot water applied to an inflamed skin will as certainly cool it off. Hence the application of ice-cold water with linen cloths, or almost boiling water with woollen flannel, is very efficient in the cure of croup. Take two or three pieces of woollen flannel, or two folds, large enough to cover the whole throat and upper part of the chest, put these in a pan of hot water as hot as the hand can bear, and keep it thus hot by adding water from a boiling tea-kettle at hand; let two or three of the flannels be in hot water all the time, and one on the throat all the time, with a dry flannel covering the wet one, so as to keep the heat in to some extent; the flannels should not be so wet when put on as to dribble the water, for it is important to keep the clothing as dry as possible, and keep up the process until the phlegm is loose, the child is easier, and begins to fall asleep; then gently wrap a dry flannel over the wet one which is on, so as to cover it up entirely, and the child is saved. When it wakes up both flannels will be dry.

EXTENSIVE DITCHES.—W. A. Hopkins, of Hampton Falls, N. H., has ditched on the marshes of Hampton Falls, Seabrook and Hampton, during the past 16 years, ditches that would reach a distance of one hundred and seventy miles.

REPORT OF HON. JOSEPH H. WRIGHT.

Gov. WRIGHT, of Indiana, is one of the most patriotic and distinguished gentleman of that State. He is, also, one of the best agricultural writers of the country. His address before the New York State Agricultural Society, several years ago, upon "The Grasses," taken, as a whole, was the best address of the kind we ever have seen. He was selected by the Government to attend the *International Exhibition at Hamburg* as a representative of this country in the important interests to be presented and considered there.

His report to the President of the United States is before us, from which we copy the following interesting paragraphs:

On my arrival at Hamburg, two weeks prior to the opening of the exhibition, with a view to the reception and proper management of American articles, which had been sent forward in considerable numbers, I found that the most ample arrangements had been made for holding the exhibition.

The extensive grounds (covering more than eighty acres) were laid off with great taste and liberality. Substantial sheds, halls and buildings, were erected for the accommodation of more than four thousand entries of stock. In addition to this, space admirably adapted for machinery of all kinds—locomotives, steam-engines, steam-plows, farm implements, mineral products, artificial manures, plants, trees, flowers, fruits, seeds, and all this, too, so beautifully arranged in the midst of the flags of more than forty nationalities, as to add to the comfort of the thousands assembled to witness this the first international exhibition in Northern Europe.

Eight of the States, to wit: New York, New Jersey, Massachusetts, Rhode Island, Illinois, Connecticut, Vermont, and Indiana, were represented by delegates from the States, or their agricultural societies, who were received with your commissioner with every token of respect and consideration which could have been desired for the representatives of our country.

Thirty-four nationalities were represented at the exhibition in their contributions, including, among other things, four thousand and one hundred of the finest horses, cattle, sheep and swine, (several of the reigning sovereigns of Europe being numbered among the contributors.) The show of horses was over six hundred. Hanover received the highest praise for the speed, size, elegance and strength of her horses. She also divided the honor with Great Britain in showing the best and purest blooded cattle.

More than one thousand persons were contributors and competitors in this national contest for superiority.

Three thousand machines and farm implements were contributed, and seventy-five steam-engines of every variety were used in operating the power and machinery. It was no show of mere art, painting, design or fancy; but one of *substantials*, consisting mainly of stock and machinery.

The principal portion of the machinery came from Great Britain; none of which is more deserving of special attention that of plowing by steam.

Some two thousand sheep were exhibited, comprising nearly all of the best breeds of Europe. It is believed to have been the largest show of fine wooled sheep of modern times. The great nurseries of merinos of Prussia, Saxony and Silesia, were fully represented, and the exhibition was the more interesting from the fact that nearly all of the continental breeds were present, some of them extensively, embracing also the bese stocks from England. It affords me great pleat sure to state that George Campbell, of Westminster, Vermont, was most successful in competing with the premium on merinos. He had three hundred and fifty competitors, yet he had awarded to him two first-class, and one second-class premium. His success was most gratifying, and the more so from the fact that the committee awarding to Mr. Campbell this well-deserved triumph were unanimous in their opinion, and each member composing the committee represented different nationalities. Mr. Campbell sold his sheep on the ground to Count Sherr Thoss, of Silesia, for five thousand dollars.

The exhibition of American machinery and implements received a great accession from a most liberal donation, from several of the leading German merchants, bankers and citizens, of the city of New York, including a complete assortment of agricultural implements. These, with the premium reaper, contributed by Mr. McCormick, in connection with many other articles from other American contributors, are to form the *nucleus* of an *agricultural museum*, to be established in Hamburg. This I regard as the most gratifying result attending this international exhibition to American interests.

Several thousand dollars were subscribed before I left Hamburg for this object, and doubtless it will be carried out by the well known liberality of her citizens.

The establishment of this museum, or depot, opens for all time to come a place of deposit for American skill and products. Hamburg is the third city of trade and commerce in Europe. Hamburg is the key, not only to the great German mind, but the open door-way to more than one hundred and fifty millions of the people of Northern Europe. With Hamburg we have rapid and almost daily communication, and it is difficult to estimate the advantage which will accrue to our mechanical skill and industry, our manufactures, our commerce and trade, by the location of a museum for their deposit in a city situated like Hamburg, whose merchant princes hold in their hands the immense trade of Prussia, Austria, Sweden, Denmark, portions of Russia and the Zollverein States. *Trade and commerce invariably bring together men whose interests are affected thereby; men will follow the fruits of their labors to market.*

HOW TO GET EARLY TOMATOES.—Mrs. E. D. Kendall, of Maryland, thus writes to the Southern Field and Fireside: "A good large turnip is far better than any hot-bed for propagating early tomatoes. Cut off the top, and scoop out to a shell three-quarters of an inch thick. Fill the cavity with rich mould, plant half a dozen seeds, and place the turnip in a box of loam. Keep warm, sprinkle with tepid water every day, until there is no longer any danger from the frost, then

remove the turnip to the outdoor bed, and thin out all but one plant. Should the turnip send out roots, pinch them off, and the shell will soon rot, affording a fertilizer to the tomato plant that will send it ahead wonderfully. A dozen turnips tomatoized will afford an abundant supply of early tomatoes for an ordinary family."

EXTRACTS AND REPLIES.

Churning by Horse Power---Grafting the Common Apple on the Crab Stock.

Some years since I saw in the *Farmer* an account of the method of churning by horse power, as practiced in Orange Co., New York. It is now gone from me, and I wish to learn through the same medium, the best method now practiced there or elsewhere; whether by dasher or crank churn, and how large a quantity can profitably be churned at once?

I have for two years past had one of A. W. GRAY & Son's horse powers, manufactured at Middletown, Vt., with the rig for sawing wood with the cog-saw, into blocks; also for thrashing. It works admirably, the power being one-third easier for the horse than any other kind in this vicinity.

I wish this spring to attach it to a churn adapted to a dairy of from forty to fifty cows. The present scarcity of laborers may lead others to a similar process.

I also wish to learn if the common apple, or its best varieties, can be profitably cultivated on the crab apple stock. The crab apple is known to flourish in this locality with all the hardiness of a forest tree; while most attempts to cultivate other varieties prove abortive. STEPHEN P. JOSLIN.

Waitsfield, Vt., March 4, 1864.

Diseased Sheep---Grafting the Butternut.

Can you, or any of your correspondents tell me what to do for my sheep that are dying with what appears to be diarrhœa, or dysentery? I have administered the "Sheep's Cordial," recommended in Youatt's Work on Sheep, but without any benefit. I cannot tell whether their disease is dysentery or not, being unacquainted with the diseases of sheep; but they begin to "scour," grow thin in flesh, their eyes assume a glassy look, and they droop and die; and no medicine yet administered has the effect to arrest the disease. If you, or any of your readers know of any cure I should be glad to be informed through the columns of the "*Farmer*."

I would like also to inquire whether the common butternut can be propagated by grafting, and by what method. M. N. C.

Vernon, Vt., March, 1864.

REMARKS.—We trust that some sheep master who is acquainted with the symptoms described by our correspondent, will reply, and make such suggestions, or give him such advice as will be of service to him.

We have never heard of the butternut tree being grafted. It would be an easy matter to try it.

A Barren Quince Tree.

I would like to know what a quince tree is worth after it has bloomed three years and not matured any fruit? Will it do to transplant, as it rests in a cold, wet place, to engraft the pear on?

I have heard it said that a limb of the quince cut in as many pieces as it has buds on it, and planted, will give as many trees, and that in three years they would bear fruit. S. P.

Derry, N. H., 1864.

REMARKS.—A quince tree in the condition which you describe, is probably worth nothing. On examination, it will probably be found defective at the roots, cut by borers, or some of the main roots decayed, perhaps, from standing in a wet and cold place.

The quince may be propagated by cuttings. They should be planted in a shaded situation, early in the spring, where they will root very easily.

Removing Grape Vines.

I have a number of grape vines standing in the field where they have stood many a year. Would it be a good plan to remove them to some select spot and cultivate them, as they appear to be a very good grape?

Derry, N. H., March, 1864. S. P.

REMARKS.—We do not recommend removing the grape vines you speak of, but suggest putting down a chestnut or locust stake, by the side of the root of one of them. Let the stake be three or four inches in diameter, two feet in the ground and six feet out. Tie the vine up to this, after cutting away some of the extreme ends. Next November trim the vines closely. If each vine in the field is served in this way, it will occupy but little room, be out of the way, and the labor so trifling that it can be no objection.

This job being done, we would suggest that the proprietor obtain some one of the best of our outdoor grapes, the Concord, for instance, and set it in a favorable place where it can climb upon some part of the buildings. By keeping grass and weeds from it, giving it water occasionally, if the season is a dry one, and a sprinkling of ashes, it will soon produce a surprising amount of fruit of excellent quality. When it is trimmed in November the cuttings may be planted where they are intended to stand, or covered in soil until spring, when they may be planted out. In this way the vines may be increased to any desirable extent.

How to Make Good Butter.

I saw in a paper the other day, some one complaining of butter being tasteless. I have read a great deal in the agricultural papers on butter-making, and there has not one come up to my rule of making butter. I will give it in short metre:

I shall not contradict anything that any one has written, except the washing of the butter after it is churned. I have made butter for my own table, and some for market, the most of the time since 1820, and I always have sweet butter. I do not wash it in cold water nor put a drop near it; I work out the buttermilk, what I can, and then salt it, and set it in the cellar till cool, then work it over, and if the butter was warm when it came it will be necessary to work it again and beat the pickle all out of it. In this way you will find a sweetness in your butter that you do not find in butter that is washed in cold water. If all of the butter-makers would practice this method, and salt it just enough to keep it, there would be no more complaint of strong, tasteless butter. S. P.

Derry, N. H., 1864.

For the New England Farmer.

CHOICE VEGETABLES.

It is very evident that there are many good varieties of vegetables in obscure places, and in the hands of those that will not take the trouble to introduce them to the public, that would be very desirable and useful for our tables. In this communication it is designed to draw out these, if possible, from their hiding places, while at the same time the example is set by making mention of what we think worthy of introduction that we have grown.

Tomatoes.

About fifteen years ago I found a tomato plant that was producing what I thought was very perfect fruit. I discarded all others, and have saved the first ripe fruit every year since for seed. By this care, I have always had since plenty of tomatoes the first week in August. I plant them in hot beds, between the 10th and 15th of April, which is much later than others plant, yet get

them, bad as the season was last year, at the usual time. They are a bright, crimson scarlet, of medium size, and ripen all around to the stem, having no hard lump as is too often the case. Still, after all my care, year after year, some plants will yield small, round ones, showing a constant disposition to go back to the original wild state.

Early Corn.

Some one introduced into the neighborhood a variety of sweet corn that should have a place in every good garden. If planted with the earliest of common varieties it will come in six to ten days ahead. It is very sweet, but small, the ears never exceeding six inches in length; therefore, should only be planted for the first ten days' use. My journal for last year reads thus: Planted, May 18th; spindled, July 3d; silked, July 15th; pulled for table, Aug. 3d; cut up perfectly ripe for seed, Aug. 15th.

Beans.

I have found an early bean that pleases me very much. It ripens ten days before the earliest that I can find in the seed stores. It has the most beautiful foliage of any bean that I am acquainted with, the leaves being large, very dark green, and corrugated along the ribs. A short, thick bush, and when quite small, it sends up above the leaves a spike of flowers on which the first pods grow; after these they grow amongst the branches like others. It does not make a great yield, if left to seed, but if picked for the table is very prolific. It was planted, side by side, with the long yellow six weeks. Record says: Planted, May 18th; pod full size, July 6th; gathered for seed, Aug. 1st; Threshed, Aug. 11th; Long yellow six weeks: Planted May 18th; pod full size, July 16th; pulled for seed, Aug. 10th; just ten days difference.

Peas.

I have been growing a pea the last two years that I think strange has not been introduced to the public before. It was sent from Maine to a friend. It is really a bush pea, and wants but one stalk in a foot; this will fill the row one foot wide and one foot high, each stalk bearing from 40 to 50 pods, held firmly above ground. It is not early as will be seen below. The pea is of the largest size, sweet as the Champion, without its tough skin. In 1862, I got 50 peas, planted them one foot apart; lost eight by cut worms and other casualties; saved the whole for seed; planted them last year and got 2½ bushels of dry seed, losing about the same per centage of plants as in the first 50; a rate of increase not easily surpassed. They were planted April 15th; full grown, July 7th; gathered for seed, July 21st.

Now I do not desire to go into the seed business, nor to humbug the community with a tree corn, or a Rohan potato speculation, but feeling it wrong to let good things run out by neglect, as they too often do, I have, by request of Messrs. Hovey & Co., of Boston, raised some seed of the tomatoes, corn and peas for their seed store. I shall plant all the beans I have of the kind mentioned above. If any one can beat the vegetables I have described, please let it be known, or if there are good things not generally known, of any of the various things wanted in a good garden, let us know it and raise seed enough to give them a start.

One thing I have tried to do, that is to get more hardy, early and reliable melons. I have taken great pains, but am not satisfied with the result. They will have strange freaks. Perhaps some one is planting year after year just what we want, and does not know its value to others, or will not take the trouble to introduce it. This should not be. We should compare notes, and the one that has got the best should make it known and let it come out. CALEB BATES.

Kingston, Mass., March, 1864.

REMARKS.—The suggestions made by our correspondent are excellent, and should be regarded by all. He sent us some of the peas last year which he speaks of, but they came too late to secure a fair trial. We intend to try the tomatoes and beans.

TOBACCO CULTURE.

In answer to various inquiries in relation to the cultivation of Tobacco, we have prepared the following article on the subject, though we have never had any experience in it, and are obliged to rely entirely on the statements of others. There is no question that the culture of this plant is profitable, and for that reason the farmers of New England will give it thoughtful attention. For ourselves, we have serious doubts about turning our lands to the production of an article whose use is needless if not positively deleterious, and we shall not wish to be understood, in publishing this article, as advocating the culture of tobacco.

Soil and its Preparation.

The soil best adapted to the Tobacco plant, is a light, rich, sandy loam, and if possible newly cleared. Next to this, old ground highly manured, and well pulverized. The exposure should be warm, and a good degree of moisture secured, though wet, springy land is to be avoided.

The Plant Bed

Should be on newly-cleared land, as the young plants will be much less troubled with weeds and grass. It should be highly manured with strong manure, well worked in, and made fine to the depth of six inches or more. For convenience of weeding, the bed should be not more three or four feet wide. Sow to a square rod of ground a table spoonful of seed, mixed with plaster, to secure even sowing, and roll or tread the bed. The sowing should be done as early as possible, after the danger of a hard frost has passed. It is a good plan to throw over the bed a covering of brush, which helps retain the moisture in the soil, is a safe-guard against frost, and also a protection to the young plants against the intense heat which sometimes attend our spring suns at noonday. As soon as weeds appear they should be removed. This is an important operation, and cannot be attended to too early or too carefully.

Transplanting.

This should not be done too early. Wait till the plants are well rooted, and have good sized leaves, or till about the middle of June. Some cultivators recommend four feet apart each way as the proper distance between the plants. Others say rows three and a half feet apart and plants two feet four inches apart in the row. The wider distance is recommended in order to give room to cultivate with a plow without injury to the tender roots. Set the plants carefully, drawing up the earth a little around it. Mr. Beardslee, of Connecticut, recommends the covering of the plants with fresh-mown grass when they are first set, if the weather is sunny and warm. In a week or so it may be removed. Mr. Crafts, of Whately, recommends hay run through the cutting machine.

Cultivating and Worming.

From the time the plants are set, the weeds should be eradicated, and the worms destroyed,

such as cut the stems and gnaw the leaves when the plants are first set out. They may be found just below the surface, near the injured plants. Clean culture must be strictly adhered to by all who would succeed in growing a remunerating crop. A successful grower in the valley of the Connecticut, recommends that the weeds should be cut up without stirring the soil much below the surface, in order to avoid injuring the rootlets. A light hoe, such as can be made of a saw-plate, and ground to an edge, and kept sharp, is a fit implement to destroy weeds among the growing plants of tobacco. A week after the plants are

set the cultivator may be run between the rows. After the plant attains much size, such a hoe as described, and the fingers, are the most useful implements for weeding, worming and topping the plants. "*Clean Culture*" is the motto of every successful tobacco grower,—especially is it so on all lands that have been manured from the barnyard, and cropped for many years.

The plants must be carefully watched from the time of setting to the time of harvesting, to protect them from the ravages of the cut-worm and the tobacco-worm, the latter being the larva of *Sphinx Carolina*, the moth being of a gray color. The worm is large when grown, of green color, with a horn-like caudal appendage, and is a very disgusting looking creature. It requires the greatest vigilance to preserve the plants from being injured by tobacco-worms. Morning and evening should the plants be examined, and both the worms and the eggs of the moth should be destroyed by the thumb and fingers. Be vigilant in worming, or else many of the best leaves of the plants will be ruined for wrappers. This may be done by faithful boys, girls and women.

The following cut represents a perfect tobacco plant, in full blossom:—

Topping.

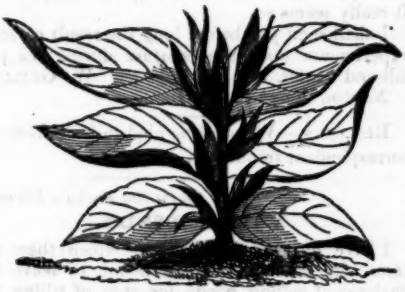
A Connecticut grower says, "Top when the majority of the plants are ready to blossom, leaving ten or twelve leaves below." Another says, "Let as many of the plants blossom as possible without forming seed. Then break off to a good leaf. There is more danger of topping too high than too low." A Cuban grower says, "When the plants have from twelve to fourteen good leaves, and are about knee-high, begin to top by nipping off the bud with the thumb and finger, taking care not to injure the leaves near the place of topping; for in a good season the top leaves will grow nearly as large and ripen as soon as the

lower ones." The cut shows a plant ready to top. The general average in Cuba is from twelve to fourteen leaves to a plant, and the writer adds that when "from sixteen to eighteen can be ob-

tained," it is desirable to do so. Those who engage in topping should immediately, when they pause in the work, wash their hands, as the acrid juice of the plant will produce soreness of thumb and fingers. The cut below shows a plant nearly mature.

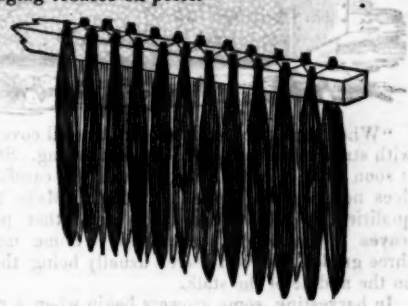
Suckering.

Suckers, which may start from every leaf, should be removed from the plant as soon as they appear after topping. Like worming, it must be promptly and faithfully done, and may be done in connection with worming, provided both can be equally well done at the same visitation. It would be quite impossible for all employees to do both equally well at the same time. Let the grower dictate as to this matter according to his experience. So important was suckering formerly regarded in Virginia, and so surely is it that suckers injure the quality of the tobacco, that at one time penal laws were enacted to prevent negligence in this respect. Below is a cut of a plant that needs suckering.



Harvesting.

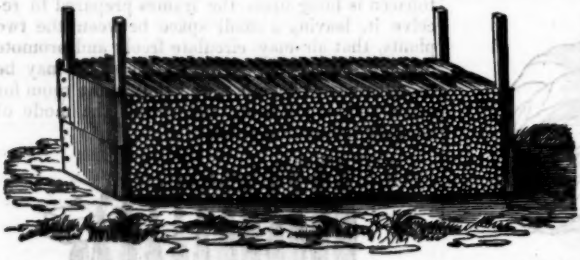
Says a Cuban grower, "Tobacco should never be cut before coming to maturity, which is known by the leaves becoming mottled, coarse, and of a thick texture, and gummy to the touch, at which time the end of the leaf, by being doubled, will break short, which it will not do to the same extent when green. It should not be cut in wet weather (nor immediately after a rain, if it can be avoided,) when the leaves lose their gummy substance so necessary to be preserved. . . . The grower should be on his guard not to destroy the quality of his tobacco by cutting it too soon. When the cutting begins, a quantity of forked stakes are set upright with poles thereon to support the tobacco and keep it from the ground. Cut the plants obliquely even with the ground. The person employed should strike the lower end of the stalk of the plant two or three times with the blunt side of his knife, so as to rid it as much as possible from sand and dirt; then tie two stalks together and place them carefully across the poles prepared to receive them. Thus they remain in the sun, or open air, until the leaves are somewhat wilted, so as not to be liable to injury, as when just cut. Then place as many plants on a pole as can be conveniently carried, and remove them to the drying-house, where the tobacco is hung upon the frames prepared to receive it, leaving a small space between the two plants, that air may circulate freely and promote drying. As drying advances, the stalks may be brought nearer together, and thus make room for more." The following cut shows the mode of hanging tobacco on poles.



"In drying tobacco," says a Cuban grower, "all damp air should be excluded, as should be drying winds. Drying should be moderately promoted, except in rainy weather, when the sooner the drying is effected the better; for it is a plant easily affected by the changes of the weather after the drying is begun. In damp weather it is liable to mildew, changing the color of the leaf to a pale yellow, and from this to a brown. When the middle stem is perfectly dry, it can be taken down and the leaves stripped from the stalk and put in bulk to sweat. This is to make tobacco of them; for before this process, when a concentration of its better qualities takes place, the leaves are always liable to be affected by the weather, and cannot well be considered as being anything but common leaves partaking of the nature of tobacco, but not actually tobacco. The leaves are to be stripped from the stalks in damp or cloudy weather, when they are more easily handled and the separation of the different qualities rendered easy. The good leaves are kept by themselves for 'wrappers' or 'caps,' and the defective ones for 'fillings.'"

Paoli Lathrop says, "It will be fit to harvest two or three weeks after topping. Cut it and let it lie on the ground till it is wilted sufficiently to handle without breaking the leaves, avoiding too much exposure to the sun, for sunburning renders the leaf as worthless as if frost-bitten. When removed from the field to the building for curing, it is passed from the load by one man to another, who hangs it by tying the twine round the first plant, and running it over the pole, then, with one turn of the twine, secures every plant till the pole is filled, then fastens the twine. If the pole is twelve feet long, hang from thirteen to fifteen plants on each side and place the poles eighteen inches apart from centre to centre. For the first few days after it is housed, give it plenty of light and air to guard against sweat, which would cause great injury. When all danger from this source is past, keep the building closed, and let the tobacco hang till the stems of the leaves are well

cured. It must thus remain until the weather is damp enough to make it soft and pliable. Then it may be cut down by one and passed to another, who packs it in a double row, tip to tip, as seen in the following cut:



"When thus packed, it should be well covered with straw or cornstalks to prevent drying. Strip it soon after it is taken down, and be careful it does not heat while piled as above. Make two qualities by putting the lower and other poor leaves in bands by themselves." Some make three grades, the best leaves usually being those on the middle of the stalk.

In harvesting, some growers begin when a majority of the plants are ripe, and cut clean as they go; others begin earlier, and cut as it ripens. Both ways have their advantages and their disadvantages. As in this respect, so in others, good growers differ in regard to points of culture and curing, every man whose mind is engaged in his business profiting from his own annual observation and experience.

In stripping, a sufficient number of leaves is tied together to form a "*band*," and the leaves are bent over, forming a head, around which a wrapper is wound and tied. These are laid in piles, the bent ends outward, which, after a few days, will be ready to pack. In Maryland, Virginia, and Kentucky, tobacco is packed in hogsheads, in Massachusetts and Connecticut, in boxes, and thus sent to market.

We are indebted to Mr. WM. L. BRADLEY, of No. 24 Broad Street, for the use of the accompanying cuts, and for many of the suggestions we have given, Mr. Bradley has originated a Tobacco Fertilizer, to promote the early and rapid growth of the plants, which has received the highest recommendations from some of the Connecticut Valley farmers. We shall give, in another article, some plans of drying houses.

For the New England Farmer.

CANKER WORMS.

MR. BROWN:—An article in *Harper's Magazine* for February, in treating of the "Geometer, or Measuring Worm," makes a very strange mistake as to the time when the eggs of the creature are deposited upon the trees.

The writer, at the outset, calls the geometer "the insect which has, of late years, become so great an annoyance by its destruction of shade and fruit trees." He adds, "it is a melancholy sight to see a tree upon which they have done their work. One would think that a fire had passed over it and robbed it of its life and glory."

This language clearly indicates the canker worm, which is such a pest among us. But this insect is *not* "produced from an egg which is deposited mainly in July," as the writer asserts. The eggs of the canker worm are deposited at any time, between the last of October and the first of May in the following year, when the state of the ground is such that the female, which matures beneath the surface, can escape, and ascend the body of the tree.

One or two varieties of the measuring worm, do, I think, spring from eggs deposited in July. But these are not the canker worm, nor closely allied to it; nor do these ever "create destruction among the fruit trees." The mistake of the writer arises from confounding the two members of the same family, one of which does all the mischief, while the other is harmless.

By the way, now that it occurs to me, last night and the night before, (March 9th and 10th,) I found the trunks of my apple trees swarming with the canker worm *millers*, (the males,) but not a solitary female could I discover. Does not this seem to indicate what some claim to be the fact, that the males are not perfected under the ground, while the females we know are? On examination I found frost still in the ground, at a depth of four or five inches, though there was but a thin crust left. Were the millers *waiting* for the appearance of their wingless companions? It really seems so.

I shall send you before long the result of some experiments upon the creature during the past fall and winter. W. GUILD.

Newton, March 11, 1864.

REMARKS.—We shall be glad to hear from our correspondent frequently.

For the New England Farmer.

WILD PARSNIPS.

I have purchased a farm on which there are some wild parsnips. Being about to leave the business of selling goods for that of tilling the soil, and being a constant reader of your interesting paper, I thought you might give me some information how to get rid of the miserable stuff.

S. W. POLLARD.

Addison, Vt., March 1, 1864.

REMARKS.—The wild parsnip is also known under the name of "cowbane," and is a dangerous plant to have about. It is reported to be an active poison, particularly to horned cattle, when eaten by them; and therefore, every farmer ought to be interested in knowing the plant and causing it to be eradicated from his fields.

If it is not very plenty, it should be pulled out just as fast as it appears, and is large enough to get a fair hold of it. If it is abundant, we know of no way of exterminating it except by plowing and cultivating the ground.

Where parsnip seed is raised, it ought not to be allowed to scatter over the ground and be

blown about by the wind over the fields, as it soon degenerates into the wild form, and then becomes a troublesome plant.

VEGETABLE GARDEN.

There is nothing so acceptable as early vegetables, and one of the most useful aids to this is a hot-bed. Every amateur should have one, as every well regulated horticultural establishment regards it as one of its most essential features. Not only is heat generated by manure more favorable to vegetation than that from any other kind of heat usually applied, but the manure it self, after being so employed, seems better tha that preserved any other way. We would sooner have one load of hotbed manure for horticultural purposes, especially for pot plants generally, than two of the same kind of manure that had not been so employed.

A south-eastern aspect is best for a hot-bed, and it should be well sheltered from winds on the cold quarter.

The foundation for the hotbed should be about eighteen inches wider than the frame to be set on it when finished, and the manure regularly laid on till about the height of three feet has been obtained, when the frame may be set on. It is not well to tramp the manure too heavily, or the heat will be too violent. Sometimes the manure is very "strawy," in which case it should be watered with drainage from the manure heap, or the heat will be "a good time coming," when it would be very inconvenient to "wait a little longer."

If the ground is dry, the soil may be dug out about a foot in depth; but for very early forcing it is best to have the whole above ground, as when sunk, the cold rain or thawing snow collects in the pit and cools the materials.

The sashes for hotbeds are usually six feet long, and about three feet wide, costing from $2 to $2.50, glazed and finished. The frame should be about 2½ feet high at back, and 1 in front—steeper at the back, if anything.

To make a hotbed, long stable manure should be employed, and if it can be turned a couple of times, before heating violently each time, before permanently using, the more regular will be the heat in the bed, and the longer it will last.

When the manure and frame are both fixed, a half inch of soil should be thrown over the manure under the sash to absorb the gross gases that would else be too strong. For a few days after, the heat will be too violent, but when the thermometer indicates a temperature of 90°, operation may begin; but the usual aim is 70°. When the bed shows signs of getting below this, linings of stable manure must be applied round the frames, one and a half feet thick, and if boards, shutters, mats, or any similar material can be spread over these linings, the heat will be maintained much longer.

Having secured the hotbed, Dahlias, Annuals, Cucumbers, Tomatoes, Peppers, Eggplants, and many other interesting things, can be started, by which we may get several weeks ahead of our neighbors in the enjoyment of vegetable luxuries, and when done with the bed in May, it will be the very place for Gloxinias, Achimenes, and many other beautiful house plants which delight in a warm, moist heat.—*The Gardener's Monthly.*

For the New England Farmer.

"SEEDING LAND TO GRASS."

MESSRS. EDITORS:—It is now generally admitted that our most valuable grass lands are our low meadows and reclaimed swamps—rich in the accumulated vegetable deposits of ages. On these many farmers now rely for their main crop of English hay, particularly in a season of drought.

Having subdued those fields by cultivation, or otherwise, the question is as to the best method of fitting them for a grass crop. In the first place I would recommend a good and sufficient ditch through the lowest part of the field; then lay out the bays two rods wide leading from the upland to the main ditch. In the fall, when your ground is in proper condition, commence plowing in the centre of the first bay and turn back furrows until you reach the second bay, then commence again in the centre of that bay and back furrow as before, and so on through the lot. The dead furrows between the bays can then be cleaned out, and these will be sufficient ditches to carry off all the surplus water into the main ditch. Now cart on a sufficiency of good compost manure, composed of barn manure, soil and sand harrow, sow the grass seed and roll.

This method I have practiced for many years with good success, and find very little more inconvenience than I should with covered drains, and with much less expense. The ditches are very easily kept clear; the bays are crowned by back furrowing; the surplus water runs into the main ditch. I find my account in giving those bays a generous top dressing of good compost manure as often as once in three years. C.

North Pembroke, March, 1864.

CULTURE OF THE PARSNIP.

The parsnip is one of the most valuable roots that can be grown. In the island of Jersey it is used almost exclusively for fattening both cattle and swine. According to Le Conteur the weight of a good crop varies from thirteen to twenty-seven tons per acre. When parsnips are given to milch cows, with a little hay, in the winter season, thebutter is found to be of as fine a color and excellent flavor as when the animals are feeding in the best pastures. As parsnips contain six per cent. more mucilage than carrots, the difference may be sufficient to account for the superior fattening as well as butter-making quality of the parsnip. In the fattening of cattle the parsnip is found superior to the carrot, performing the business with more expedition and affording meat of exquisite and highly juicy flavor; the animals eat it with much geediness. The result of experiment has shown that not only in neat cattle, but in the fattening of hogs and poultry, the animals become fat much sooner, and are more healthy than when fed with any other root or vegetable, and that, beside, the meat is more sweet and delicious. The parsnip leaves being more bulky than those of carrots, may be mown off before taking the roots, and given to oxen, cows or horses, by which they will be greedily eaten. Another thing in favor of parsnips for this country is, that the frost does not injure them. They may remain in the ground until spring, when they make splendid feed, at a time every other kind of root or green thing is scarce, or they may be

slightly buried, where they can be obtained almost any time during the winter. On account of their rapid growth when young, the weeding is less trouble than weeding carrots.—*Exchange.*

NEW ENGLAND AGRICULTURAL SOCIETY.

Being unable to attend the meeting of New England agriculturists at Worcester, on Wednesday, March 2d, we cannot give so full particulars of the formation of the NEW ENGLAND AGRICULTURAL SOCIETY as we desire to do. We shall take an early occasion to speak of its prospects and opportunities of benefiting the agricultural community.

The Society was organized by the choice of the following officers:

President—George B. Loring, of Salem.

Vice-Presidents—Ezekiel Holmes, of Winthrop, Me.; Frederick Smyth, of Manchester, N. H.; Daniel Kimball, of Rutland, Vt.; William H. Prince, of Northampton, Mass.; T. S. Gould, of West Cornwall, Conn.; Amasa Sprague, of Cranston, R. I.

Secretaries—Charles L. Flint, of Boston, Mass.; Henry Clark, of Poultney, Vt.

Treasurer—Thomas Saunders, Brookfield, Vt.

TRUSTEES.

Maine—Samuel F. Perley, of Naples; John F. Anderson, of South Windham; C. C. Chamberlain, of Foxcroft; T. S. Lang, of North Vassalboro'; William D. Dana, of North Perry.

New Hampshire—Joseph B. Walker and Moses Humphrey, of Concord; S. W. Buffum, of Winchester; Nathaniel Hubbard, of Tamworth; Nicholas V. Whitehouse, of Rochester.

Vermont—Col. Daniel Needham, Queechy; George Campbell, Westminster; Edwin Hammond, Middlebury; Ebenezer Bridge, of Pomfret; A. M. Clarke, of St. Albans.

Massachusetts—C. O. Perkins, Becket; Paoli Lathrop, of South Hadley; H. H. Peters, Southboro; S. B. Phinney of Barnstable; A. W. Dodge of Hamliton.

Rhode Island—Edward D. Pearce, East Providence; William Goddard, Warwick; Alfred B. Chadsey, of Wickford; James De Wolf Berry, of Bristol; Thomas B. Buffum, of Newport.

Connecticut—J. G. Webb, of New Haven: Benjamin Sumner, of Woodstock; Robbins Battel, of Norfolk; E. M. Adger, of Middletown; C. M. Pond, of Hartford.

The meeting was attended by about 150 of the leading farmers of New England.

PHYSIOLOGICAL PHENOMENON.—The New York *Post* has the following interesting item:

A lady of this city, noted for the acuteness and accuracy of her observation of life and society bears her testimony to a remarkable physiological fact, owing to moral causes, which is worth stating for the purpose of its being verified. She affirms that of the births taking place in this city, those which occur in families whose attachment to the Union is decided and zealous are mostly boys, while in families in which there is a decided sympathy for the secession cause they are girls.

For the New England Farmer.

SOME EXPERIMENTS WITH COE'S SUPERPHOSPHATE OF LIME.

I am an interested reader of the *Farmer* (Monthly.) The articles that interest me most are those giving the result of carefully tested experiments. And as others of your readers may be equally interested, I will give them, through your columns, some of my experience with Coe's Superphosphate of Lime.

Experiment No. 1.

In 1859 I was induced by the representations of a friend, of the benefit he had derived from the use of Coe's Superphosphate of Lime, to purchase a bag of it, containing one hundred and twenty-five pounds, which I used mostly for corn, putting about one tablespoonful in a hill, and then put a shovelful of compost manure on top of it—with the exception of two rows in which I did not put compost—and planted with Dutton corn. The seed where there was no compost in the hill did not come up as soon as the other by about a week, and did not grow much until July, when it took a start and grew rapidly. At harvest time there was but very little difference. Perhaps I should state that I plowed in a light coat of manure. I had a few pounds of the Lime left which I applied to ruta bagas, putting one-third to one-fourth of a tablespoonful in a hill with the seed. But little of the seed came up; those grew to fair size. The next season I sowed the land to barley and grass. I could see the hills where the Lime was put the previous season, in the grain, which grew more rank there. It was also perceptible in the grass the following season.

Experiment No. 2.

In 1861, not having a sufficiency of suitable manure to put in the hill to start my corn, I resolved to try Coe's Superphosphate of Lime on half an acre. The ground was mostly sward land, plowed a few days before planting, manured broadcast with new stable manure, and plowed under, with the exception of a strip about a rod in width on one side, where I spread the manure on top of the furrows and harrowed it in. I put one tablespoonful of the Superphosphate in each hill—with the exception of two rows in which I put but half as much—covered about half an inch deep with the soil, and planted the corn. The seed came up well, and for a week looked promising; but where there was no manure spread on the surface, it then began to look yellow, and the ends of the leaves died. Upon pulling up some of the plants the tap root was found to be dead. There were some hills that grew well, and some hills would have one or two stalks that grew well, but the yield was very light. There was no perceptible difference to myself, or others whose attention I called to it, between the rows where I put a spoonful, and those where I put but half. But the corn upon the strip manured on top of the furrows, and also one corner that was planted the previous season, grew well. What made the difference? It was not because the Superphosphate was different, for the rows ran across the two parts. Of some half a dozen lots that came under my observation, the result was the same in every case. Where the stable manure was plowed in on sward land, and Coe's Superphosphate put in the hill, the corn proved almost a failure, caus-

ing the loss of several acres in my vicinity.

Experiment No. 3.

I resolved to make one more trial of Coe's Superphosphate, and mark the result more particularly. In 1862 I prepared a piece of land for corn, plowing in new stable manure. I then put a tablespoonful of Coe's Superphosphate and one-third to one-half a shovelful of well-rotted stable manure in a hill, on all the piece, with the exception of two rows in which I put the same quantity of manure without the Superphosphate, and marked them. There was not any perceptible difference between the corn in those rows and those beside them that had Superphosphate in the hill, while growing. I harvested and weighed the corn of the two rows without, also two with Superphosphate in the hill, one row on each side next to the two without the Lime, with the following results:

With lime in the hill, 140 lbs. large corn, 19 small.....159
Without do. " " 135 " " " 20 " 135

Upon another piece I tried a like experiment, excepting there was no manure spread broadcast—sward land manured in the hill only. The following is the result:

With superphosphate of lime, 113 lbs. large, 34 small.....147
Without " " " 108 " " 38 " 146

The following is the result of an experiment with potatoes. A fair portion of stable manure plowed in; a spoonful of Superphosphate put in all the hills but two rows, in which I put but half as much. Result of weight in harvest:

A spoonful in a hill, 117 lbs. large, 36 small.....153
Half-spoonful " 112 " " 36 " 148

My land is a clay soil on a clay pan. Others in this vicinity have used Superphosphate with much better results. A friend tried it upon a piece of poor gravel soil that had been formerly cultivated, and then pastured until it would bear but very little feed; planted it with Jackson White potatoes, using no manure but a spoonful of Coe's Superphosphate in a hill, and got a fair crop. He has used it for corn, also, with good results. His cattle are inclined to chew bones, while ours seldom do so. Is it not because his soil is deficient in that property to a greater degree than mine, that he gets so much better results from Superphosphate?

J. L. P.

Northampton, N. H., March, 1864.

REMARKS.—To us—with all our reading, observation, and the actual experiments of several years—this matter of the use of specific fertilizers, as they are called, is still involved in mystery. Similar experiments have often occurred in our own neighborhood, where the results have been utterly unlike and entirely beyond any reasonable explanation that could be given. One thing, however, seems to us to be well settled, viz., that it will not answer to depend upon any of the specific fertilizers, *alone*, for a profitable crop. But we have heard of exceptions to this. There is no doubt but that a large crop can be secured from them without the agency of other manure, but there are many doubts whether it would be a profitable crop. Financially speaking, it is of no use to make "two spears of corn or grass to grow where only one grew before," unless we can do it profitably—that is, that it shall return to us more than it costs. The same rule is applicable to the specific fertilizers.

EXTRACTS AND REPLIES.

Time for Sowing Barley.

Can you tell the best time to sow barley? Some say if sown too early, it is liable to injury by late frosts.

Mansfield, March, 1864. E. C.

REMARKS.—The time of sowing barley, as with all other grains, must depend, in some measure, upon the condition of the soil. If the weather appears settled, and the soil is in a crumbling, or pulverulent condition, barley may be sown as soon as the 20th of April, and any time afterward to the 10th of May. The rule should be, *the sooner the better*, if the ground is in good condition.

Feeding Rye to Sheep.

Can you, or any of your correspondents, tell me whether rye is good for sheep before and after dropping their lambs? And if so, how much per day?

A READER.

East Hardwick, Vt., March, 1864.

REMARKS.—We have had no experience in feeding rye to sheep, and must leave the information desired to be furnished by those who have.

Culture of Onions.

I read a piece in the *Farmer* of Sept. 26, on raising onions, by Mr. Horace Ware, of Marblehead. The writer goes on to say,—This season Mr. Ware has 14 acres of onions and they would yield five hundred dollars per acre. Now, you would do me and the public a great favor to let us know how the thing is done; that is, how the land is fitted, how and when sown, what quantity of seed per acre, and how to save them from worms.

The best remedy against the onion worms that I know of, is to dig the dirt all away from the onions, so that they will fall down flat on the ground. If you know anything better let us have it. But please let us know how Mr. Wade raises onions, for he must be a workman at the business.

SAMUEL T. DANFORTH.

Williamstown, March, 1864.

REMARKS.—We are not able to give the details required, but hope Mr. WARE will oblige us and the public, by giving us, for publication in the *Farmer*, the information asked for.

A Good Example for Biddies.

Jas. F. Bramer, of Holliston, has a Brahma pullet who began to lay Nov. 21, 1863. She was then six months old. For her first litter she laid 23 eggs, the second litter 21 eggs, the third litter 30 eggs, and still laying. The whole weight of her eggs is 9 pounds 14 ounces. I thought these facts might interest some of the readers of your valuable paper. The weight of this pullet is 8 pounds.

CACKLE.

Scours in Sheep.

I send you a few statements for the benefit of your correspondent from Vernon, relative to his sick sheep, that are dying with the dysentery. This is a disorder we have not had in this section, as yet, but we are having many cases of what is termed the stretches, that often proves fatal. This disease is a stoppage of the flow of urine, produced by an inflammation on the kidney, or on the lining membrane of the ureter, which conveys the urine to the bladder. I prepare a medicine, (which is also for the human species in both of the above complaints,) which I use with perfect success. The one for kidney complaint, I have given to sheep with stretches in my neighborhood, without a single failure. The one for dysentery and diarrhœa has not been known to fail in one instance, when used

in the human species. Why should not this medicine apply to sheep equally as well as the other?

Washington, Vt., March 27, 1864. H. P. GALE.

I saw an inquiry for a remedy for scouring sheep, by "W. N. C." of Vernon, Vt., to be sent through the columns of the *Farmer*. My method of treating such sheep is, to take raspberry leaves and hemlock bark, steep them together and give ½ pint three times a day. I have tried this with my sheep, and never knew it to fail. The remedy is simple and certain.

Benton, N. H., 1864. W. C. W.

IN COUNCIL WITH THE HILLSBORO', N. H., FARMERS.

Some of the farmers in the southern part of Hillsboro' county, New Hampshire, having invited us to meet them and discuss some of the matters of general interest pertaining to their avocation, we went to Amherst on Monday last in company with Dr. JOSEPH REYNOLDS, of Concord, and found the people assembled in the Town Hall when we arrived, at about 3 o'clock, P. M. No special subject for discussion having been previously suggested, it was decided to adopt the following: *What course is it for the interest of the farmer to pursue, under the present circumstances of war and high prices?* The discussion was entered into with zeal, soon became animated, and many striking facts and suggestions were presented and enforced. Dr. REYNOLDS spoke about twenty minutes with energy and directness, and adduced reasons why the farmer should not stay his hand in producing the crops that must not only supply our home wants, but which are also indispensable in sustaining our brave armies that have been sent into the field. He thought it the duty of the farmer to *extend* his labors rather than abridge them, under this state of things. That he should hire his usual help and pay the advanced price of wages, and trust, for remuneration, to the higher prices which his products will be likely to bring in market. He said,

When a man attempts to speak to his fellow-citizens, his mind almost instinctively reverts to the subject that is in all our hearts and in all our thoughts—our country, torn, distracted, bleeding at every pore. We have now become so hardened, by familiarity, that we can think and talk, more calmly, and with less excitement, than at first; but we never, for a moment, forget it; we carry the burden wherever we go, and think of it whatever we do. We have reference to it in all our business arrangements. When we buy or sell, we are reminded of it, by war prices. If we propose to hire a laborer, the question occurs at once, whether we can afford to pay his price; whether we had not better let our land lie fallow, and barely cultivate enough to feed our families. Every thoughtful, and sensible, and patriotic man has come to the conclusion, or will soon do so, that he can best serve his country, and assist in completing the great work on our hands, by pursuing skilfully and energetically, the industrial avocation in which he is engaged. Large supplies of mechanical and farm products are wanted, not only to supply our wants at home, but to supply the wants of the armies in the field. Meat and meal, flour and wool, are as much material of war as powder and ball, and guns and swords, and the war can no more be carried on without the one than the other, and it is the business and the duty of the farmer to supply the former, as it is the business and the duty of the soldier to use the latter. If we had money, and could supply the government with all it wants, this would not feed the armies. They want beef and pork, and flour and corn, and must have them, and we must supply them. If labor is high, we must cultivate more skilfully, and then make the labor more productive. We must use more machinery and more animal power. We must make the horse do the labor that has been done by human hands. Mark out the field, and drop your potatoes in a row, and cover them by turning a furrow with your horse, on to each side of the row. In this way, a horse and one man will plant faster than two men can in the usual way. Then use the cultivator between the rows, and in the autumn use the potato digger. Plant your corn with the corn planter, drawn by the horse. Use the drill to sow your seeds, even your wheat and millet, and you will plant not only more rapidly and cheaply, but will get larger crops. Thus the high price of labor will introduce better and cheaper methods of culture. There will be more farm machinery used this year than ever before. Farmers will use the best tools they can find. The manufacturers of the Buckeye mowing machine could not fill their orders last year, but fell behind several hundreds of machines, and there will be more wanted this year than last.

He did not mean that every farmer should try to raise every kind of crop. Let each raise that crop which he can raise best; that which is best suited to his soil, or which he is best prepared to cultivate. Immense quantities of beans and oats are wanted, and bring high prices. They are easily raised, and if you use a threshing machine, the labor will be comparatively small. Butter is at present enormously high, and if you were sure the present prices would be kept up you could afford to make milk for market. But whether it will be best to change your dairy arrangements, and convert your milk into butter and pork, each must determine for himself. It will depend very much upon his conveniences and the skill of his family. It is very certain that the present prices of milk do not compare with the price of butter. The raising of stock and pork requires less labor than the raising of hoed crops. But whatever you do, do it well. Raise the best stock, the best sheep, the best swine. If you make butter, get the best butter cows. Milk differs in the quantity of butter it yields, from six to twenty per cent. Use the lactometer, and if you find that the milk of a cow yields less than ten or twelve per cent., turn her to the butcher, or exchange with the milk raiser. The butter maker certainly cannot afford to keep her. It costs more wear and tear of mind as well as body to carry on business now than it does in quiet times, when everything moves on in the ruts; and we have got to be active. We must join the wide-awakes, or we shall run off the track. The world is full of ideas, and ideas are the seeds of facts, the germs of work. We must gather them up, reduce them to order,

arrange them into machines, and set them to work, and thus the forces of nature will be subjected to the service of man. It is thus that while we are carrying on the greatest and most expensive war of modern times, we must supply the material of war, and at the same time supply our domestic wants.

Mr. JOHN MILLS, Secretary of the Hillsboro' Co. Ag. Association, in the course of his remarks, related the story of a farmer's wife who, a few days ago, went to the store to purchase a new dress. When the seller told her the price of the cloth, she thought it ruinously high and extravagant, but when the price of the butter and the eggs was stated, with which she was to pay for the dress, she declared that she had purchased it as cheaply as ever!

The Rev. J. GARDNER DAVIS sustained the views of the former speakers, and urged that a relaxation of effort in a crisis like the present would be unmanly and disastrous. He had always observed that men were successful that were persistent—whose motto was, "stick to it, stick to it." These are the men who achieve victories in every department of labor, whether in the closet, camp or the field.

Col. C. H. CAMPBELL, of Amherst, and others engaged in the discussion, which was continued with unabated interest until nearly ten o'clock.

After a night of refreshment in the hospitable family of E. D. BOYLSTON, Esq., editor of the *Amherst Cabinet*,—my companion stopping with Col. Campbell,—we went to Milford, and had a morning and afternoon meeting there. The subjects discussed at these meetings related more directly to the practices of agriculture, under the general question—"How can agricultural employment be made profitable?"

In answering this question, many facts were stated and questions asked and responded to, and the culture and profit of many crops stated. Among others, the comparative profit of selling milk, or of making it into butter and selling that, was earnestly discussed. It was urged that more profit can be derived from milk by making it into butter than by selling the milk at any prices yet paid for it to go over the road,—and that about the only reason why the farmer who seeks the largest profit should sell his milk, is, where his circumstances are such that he would be obliged to hire *just so much extra help* as would be required to perform the labor.

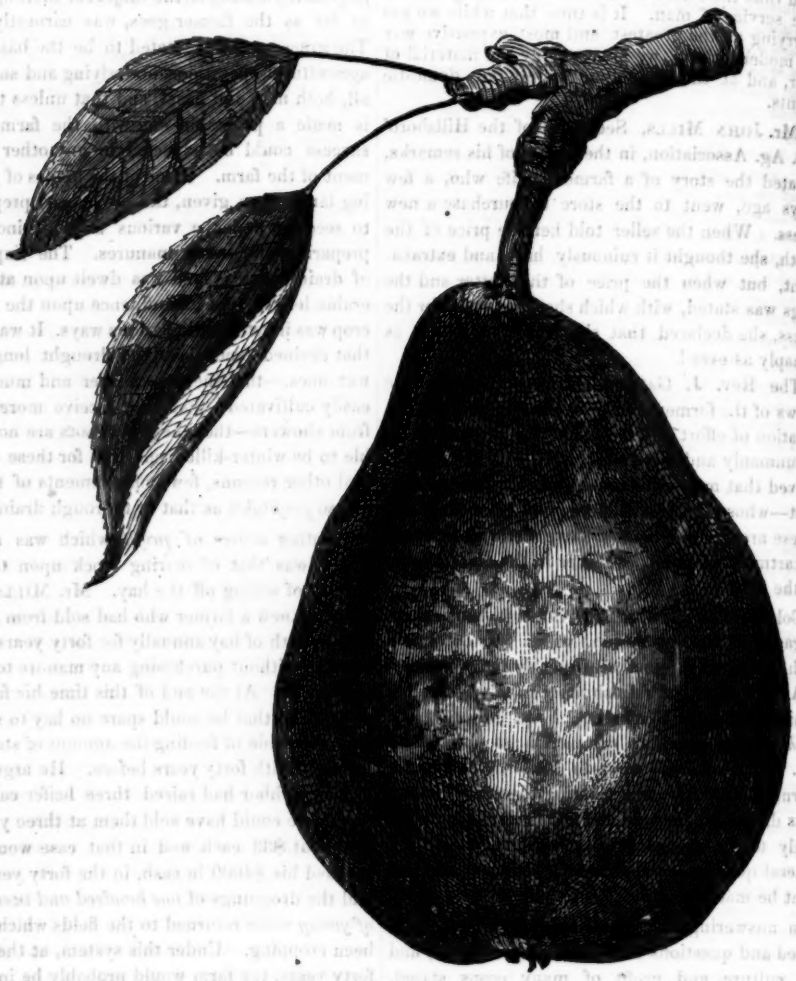
Another strong argument was presented, and illustrated by many facts, that selling the milk impoverished the farm more rapidly, even, than selling off the hay; as in this case nothing is returned from it to the soil, while in making butter the skim milk goes to the swine and the buttermilk to family uses.

In replying to the general question, as to *what profitable farming is*, the subject of thorough work, as far as the farmer goes, was earnestly urged. The grass crop was stated to be the basis of all agricultural operations, underlying and sustaining all, both man and beast, and that unless this crop is made a profitable one with the farmer, little success could be expected in any other department of the farm. Some of the modes of reclaiming lands were given, the crops used preparatory to seeding, and the various ways of increasing, preparing and using manures. The importance of draining grass land was dwelt upon at considerable length, and its influence upon the soil and crop was illustrated in various ways. It was shown that drained lands bear the drought longer than wet ones,—that they are earlier and much more easily cultivated—that they receive more benefit from showers—that the grass roots are not so liable to be winter-killed, and that for these and several other reasons, few improvements of the farm are so *profitable* as that of thorough draining.

Another *source of profit* which was strongly urged, was that of rearing stock upon the farm instead of selling off the hay. Mr. MILLS stated that he knew a farmer who had sold from his land $100 worth of hay annually for forty years in succession, without purchasing any manure to supply this waste. At the end of this time his farm was so reduced that he could spare no hay to sell, nor was it capable of feeding the amount of stock that he began with forty years before. He argued that if his neighbor had raised three heifer calves annually, he could have sold them at three years old for about $33 each, and in that case would have realized his $4000 in cash, in the forty years, and had the droppings of *one hundred and twenty head of young cattle* returned to the fields which he had been cropping. Under this system, at the end of forty years, the farm would probably be in a condition to sustain more stock than ever before, and would have gained as much in its grain, vegetable and fruit crops as in the grass.

The discussion was participated in by FRANCIS WRIGHT, Vice President of the Association; P. M. ROSSITER, Mr. BARTLETT, ABEL CHASE, and others, with great apparent interest.

We found many earnest thinkers and inquirers among the Hillsboro' farmers. A few well attended meetings, and a lively discussion of some of the important questions now presented to cultivators of the soil, would rouse the farmers of the whole country into a new interest, and some *new practices* in their business. We trust these will take place. They cannot seek *profit* more directly in any other way. There are plenty of intelligent men among them to take the lead in the good work.



CLAPP'S FAVORITE PEAR.

We have been favored by Col. WILDER with an engraving of this new fruit, which is figured above. We have not tested it in any way, but from the high reputation which it has attained, have been desirous to present the reader with its general appearance and merits. The description is by Mr. HOVEY, and was published in his *Magazine* for October, 1861, and is as follows:

This very fine pear was raised by Mr. N. CLAPP, of Dorchester, Mass., and was exhibited last year, (1860,) for the first time, before the Massachusetts Horticultural Society and the Fomological Society at Philadelphia, in whose transactions a full account of it is given by the committee on native fruits. This year it has been shown again, and by the kindness of Mr. Clapp we have been enabled to test its quality once more, and give a description and engraving of the fruit.

That this pear has fruited this year shows, that while it so nearly resembles the Bartlett in appearance, it is so hardy in its character as to resist the severe cold which so generally affected the Bartlett; and in quality it certainly is its superior. Its production only confirms the opinion we have before expressed in describing Mr. Dana's seedlings, that we have only to persevere in raising seedlings to make our collection of native varieties unequalled by that of any other clime. What the supposed parent of Mr. Clapp's seedling is we have not learned, but the great resemblance of the Favorite to the Bartlett would lead us to select that. At any rate it is likely to prove a very valuable acquisition.

Size, large, about four inches long, and three in diameter: *Form*, obovate pyramidal, largest near the middle, rounding off towards the crown, and narrowing to the stem, with a slightly uneven surface, generally resembling the Bartlett: *Skin*,

fair, smooth, yellowish-green, becoming full yellow at maturity, marbled with dull red in the sun, and dotted with small russety specks: *Stem*, medium length, about half an inch long, stout, and obliquely inserted without any cavity on the rather obtuse end: *Eye*, medium size, closed, and but little sunk in a very shallow puckered basin; segments of the calyx projecting: *Flesh*, greenish-white, rather fine, melting and juicy: *Flavor*, sprightly, refreshing, perfumed and excellent; *Core*, medium size.: *Seeds*, medium size. Ripe in September.

ON BUTTER-MAKING.

An article recently published in the *Farmer*, entitled "*Butter-Making No Mystery*," has attracted considerable attention, and has been commended by some, and objections made to it by others. We have spoken several times, of the manner in which a friend of ours, Mr. JOHN DAY, of North Andover, Mass., manages his farm and of the great fertility to which he has brought its acres, from a repulsive and barren condition. We have visited his farm, examined its crops, and the arrangement of its buildings, and listened with especial interest to his account of reclaiming it, and the profits which he has derived from its various departments.

In a recent interview with him the conversation turned upon the subject of *butter-making*, when he remarked that he did not quite agree with the writer of the article, "*Butter-Making no Mystery*," in the statement that the cream should always be of a uniform temperature, viz: about 63°. He said he had at one time forty-six quarts of cream which he divided into two equal parts. One part was churned at 62°, came in 15 minutes, and the product was between 21 and 22 pounds. The other part had been standing in a tub of ice water over night, and was as cold as ice water would make it, and was kept so while being churned by ice on the top of the churn. It came in *two hours*, and the product was 28 pounds! It came in a hard condition, the buttermilk flowing freely from it, and it brought *eight* cents per pound more than the first lot, which came rather soft and the buttermilk mingling with it.

The churn used was a square one, with a crank, and only two paddles or floats.

He uses one ounce of salt for a pound of butter, if the butter comes soft, because some of it dissolves and runs out in working the butter; but if it comes hard, *three-fourths* of an ounce is sufficient.

The rule of one temperature at all seasons, he thinks does not work well. In the winter, he has a stove in the milk room and keeps the temperature at 65° or 66°, and does the churning there, and under these circumstances has excellent results. In the summer, in order to receive similar results, he brings the cream down as low as ice will make it, by putting ice in the churn over night, and keeping it about it while churning.

We understood Mr. Day to say that his experience has grown out of *eleven* years of practice and experiment, not merely in assisting others, but in making the butter himself, setting and skimming the milk, churning, salting, preparing for market, and washing the utensils! With such an experience as this, Mr. Day ought to know all about the matter, as he is a man who looks into the causes of things upon which he is laboring, with the keenest perceptions.

"JUNE IS THE TIME TO PRUNE FRUIT TREES."

I am aware at what disadvantage I place myself when I undertake to controvert such authority, namely, Mr. Barry, of Rochester, and Mr. Harris, Editor of the Genesee *Farmer*, and would not put the case so strongly in opposition to common practice, had I not in *every instance*, where I have induced any one to try pruning in June, succeeded in gaining their acknowledgment that June *is the time to prune fruit trees.*

Nor would I venture to *advocate* such practice upon my own experience were I not able to give the best reasons for it. Such as cannot be gainsayed or controverted.

It is a question of vital importance to the health and durability of our trees, and should this much find favor in your paper, I will undertake, in the next, to give my reasons for pruning in June, July and August, and suggestions as to why and how we should prune.—E. D. WRIGHT *in Genesee Farmer.*

REMARKS.—We are glad to find some one, occasionally, bold enough to denounce the ruthlessa practice of pruning fruit trees *when the sap is in an active condition.* Prune when the tree is in a comparatively quiet condition,—say from June 15 to the end of the month, or for a month after the leaves fall. There are physiological reasons for this which we have often referred to in these columns.

SOAP SUDS.—During the summer these can be applied directly to garden crops and fruit trees, and thereby act as a fertilizer, and at the same time assist in supplying moisture to them in the hot days of summer. Some farmers have spouts which convey the suds and house-slops to the barn-cellar, and for the greater part of the year these are in working order. But in the winter the spouts will not convey the slops, and there is a considerable amount of it wasted. To obviate this, a muck-heap should be made near the yard, with a concave top, so that the slops can be turned into it, and absorbed by the muck. It may freeze some in winter, but the reviving atmosphere of Spring will set everything all right.

A GOOD, soft, dry bed is an important item towards the thrift of animals. It assists them in keeping warm, and in this it saves food; it inclines to rest and quietude, and in this it aids the action of the secretory glands.

For the New England Farmer.

SEEDING LAND TO GRASS.

I was glad to see a reply elicited to this very important subject, from your correspondent, "C.," of North Pembroke. Such communications draw out the opinions of men, though very remotely situated one from another, and can hardly fail to be of some benefit to the farmer. Your correspondent admits that I have "some very good ideas in relation to laying down land to grass," but cannot agree with me that "all lands for cultivation should be plowed in the fall." That lands for cultivation should not be plowed in the fall, I think is hard to prove. The advantages of turning over sward land in the fall are numerous.

1. Because there is always a covering of grass then on the ground, which, if turned under in the fall and allowed to remain undisturbed in spring, will be of very great service to the growing corn or potatoes when the roots come in contact with it. Here I will remark that the sod should not be moved until pulverized.

2. Because by plowing in the autumn it has an inevitable tendency to destroy the cut worm, the wire worm, the beetle worm, bugs, &c. I have seen a field of corn planted in this way, that is, plowed in the fall of the year, having had first spread on the sod, about twenty common buck loads, of about thirty bushels each, of green stable manure, then turned under. Then another field of corn adjoining the same, in fact all the same lot of land, treated the same in every respect as near as we could tell, the same amount of manure, &c., but plowed in the spring. The corn on the land plowed in the fall was a great deal larger, hardly any of it destroyed by the cut worm, or any other worm, but on that plowed in the spring the corn was smaller, and a very great amount of it destroyed by the cut worm; the contrast between the two pieces lying side by side was very apparent indeed.

3. Because the vegetable matter, if turned under in the fall, will become decomposed, and be of more service to the growing crop in the spring and summer following than if turned under in the spring; this is quite reasonable, for it has more time to decompose in.

4. Because the farmer has more time and can better attend to it in the fall than in the spring. As to the objection alluded to by your correspondent, to "plowing silicious, loamy lands in the fall," I do not see that it can be an objection, if the manure is applied broadcast before plowing, as it always should be. He does not inform us whether those farmers who plow in the fall, manure in the fall or not; if they do not the practice is erroneous, we think; we have often seen farmers in this vicinity plow their sward land in the fall, and then cross plow in the spring again, doubling their labor and losing, to a certain extent, the value of the decomposed vegetable matter.

I admit the force of the argument of his in favor of laying down some kinds of soil in the fall of the year, to grass exclusively. But let us not lose sight of the question at issue, viz.: whether it is best to sow grass seed with some kind of grain or not, because the growing grain shades the land, and thereby facilitates the germination of the grass seed and protects the young grass itself by holding moisture? I answered then, and do now, in the affirmative, as a matter of economy, but think the grass may be shaded too much, and said in my former correspondence that it would be hard to demonstrate that a piece of land laid down to grass exclusively would not do as well as laid down in any other way. But there is an objection, furthermore, to seeding land to grass in the fall, if clover is used, on account of its liability to "winter kill." I never could see the economy of cross plowing sward land, as stated above, and think the advantages of letting the sod remain undisturbed until the vegetable matter is decomposed, are not well understood. Almost any soil, if plowed in the autumn, will sufficiently decompose by the second year, so as to be suitable to lay down to grass and grain, if the sod is not moved, thereby admitting of a rotation of crops, which is very essential. Futher, I think it is not good economy to "keep up" sward land more than two years, as a general rule; say first, corn; then follow with some kind of spring grain with grass; so the rotation would be corn or potatoes, oats, barley or rye and grass. I would not plant corn or potatoes twice in succession on the same land, ordinarily.

J. F.

Uxbridge, March 23, 1864.

A HINT TO FARMERS.

The correspondent of the London Star in Schleswig says: "A pleasing phenomenon, which I had before remarked in every part of the duchies I had hitherto visited, met my eye again on the drive to Christiansfeld. On the outside of every cottage and farmhouse we passed—even, indeed, on many of the trees by the roadside—hung several little square wooden boxes, rather bigger than a London quartern loaf. In the centre was a small round aperture, large enough for any bird from a wren to a thrush to go in and out. On inquiry I found that these little contrivances were, what they appeared to be, homes for any little pair of warblers which pleased to build their nests in them. Some years back the farmers were justly punished for the devastation which, under the influence of false ideas, they had made amongst the feathered tribe, by the vast increase of insects which played havoc with their crops. Like sensible men, they were no sooner convinced of their error than they did their best to remedy it. Societies for the preservation of birds were soon formed; the farmers everywhere did their best to forward the objects of the association, and bird-murder became a misdemeanor. As the consequence of these measures the country is now plentifully stocked with numerous classes of birds. Flocks of crows, ravens, larks, fieldfares, linnets, and yellowhammers, as well as other kinds, are to be seen wherever one drives, and appear to have lost much of their natural timidity under the good treatment they have received of late years."

☞ The report of the Ohio Commissioners of Statistics shows that in 1862 there were made in that State no less than 8,280,000 pounds of sugar. Of this, 27,000 pounds were from sorghum. The aggregate value of the agricultural products of Ohio in 1862 was $151,863,574; of this amount the sugar production was worth $822,190, and the molasses crop $1,942,854.

HAPPINESS is like a pig with a greased tail, which everybody runs after but never can hold.

LADIES' DEPARTMENT.

WAITING FOR THE SPRING.

As breezes stir the morning,
A silence reigns in air;
Steel-blue the heavens above me,
Moveless the trees and bare:
Yet unto me the stillness
This burden seems to bring,—
"Patience! the earth is waiting,
Waiting for the Spring."

Strong ash, and sturdy chestnut,
Rough oak, and poplar high,
Stretch out their sapless branches
Against the wintry sky.
Even the guilty aspen
Hath ceased her quivering,
As though she, too, were waiting,
Waiting for the Spring.

I strain mine ears to listen,
If haply where I stand,
But one stray note of music
May sound in all the land.
"Why art thou mute, O Blackbird?
O thrush, why dost not sing?"
Ah! surely they are waiting,
Waiting for the Spring.

O heart! thy days are darksome;
O heart! thy nights are drear;
But soon shall streams of sunshine
Proclaim the turning year.
Soon shall the trees be leafy,
Soon every bird shall sing;
Like them, be silent, waiting,
Waiting for the Spring. *Once a Week.*

HIGH DRESSES.

We are thankful for at least one of dame fashion's freaks; she has turned her back upon low-necked dresses, and rather insists that collar bones and shoulder blades shall be covered. It is certainly a great improvement—not only because the study of anatomy in private parlors is not desirable, and that American damsels are apt to run to bone as some tall flowers do to seed; and because spinsters of uncertain age, fearful of being outdone by their nieces, presented such vast expanse of yellow neck and shoulder to the view at evening parties as were calculated to alarm nervous people very seriously; but because, since custom obliges us to wear garments, there can certainly be no reason why we should leave the most delicate portion of our frame without protection. Plump shoulders and arms are pretty. But so (let us whisper) are plump legs. The mother who should fail to provide her daughter with stockings would be considered a cruel wretch, yet a year ago she might neglect to cover her chest and arms with impunity. We trust this state of things is over. We hope that the wisdom which causes every prudent parent to protect the pretty shoulders of her little girls with comfortable woollen sacques or capes will be appreciated; that sense will conquer vanity, and that in a little while it will be as absurd to see a woman in a low-necked dress as it would to-day to see a man in a low-necked coat.—*Sunday Times.*

THE three rules given by the celebrated John Hunter for the rearing of healthy children were, "Plenty of milk, plenty of sleep and plenty of flannel."

WORDS are but the froth of thoughts.

HOW TO PRESERVE YOUR FURS.

Furs, says a writer in one of the New York papers, who seems to be thoroughly familiar with the subject, should never be put away for the summer and forgotten, as they so frequently are; and, next to being shut up from the air, their greatest enemy is damp. If, from the wearer being exposed to rain, they become wet, they should always be dried at a moderate distance from the fire immediately; and in warm weather, when not required for wear, they should never be shut in a box or drawer for more than a few days at a time, and every few weeks they should be shaken and beaten.

The more delicate skins require somewhat more delicate treatment. The best plan is, probably, not to pack furs away, but to let them lie in a drawer or wardrobe that is constantly being opened, so that they may meet the eye frequently, and being thus often in sight, it is easy at convenient opportunities, to have them taken out and beaten; or, at any rate, shaken and tossed and thoroughly exposed to the air. It is common to hear it remarked that the moth gets into furs, as if the insect actually migrated from one locality to another; the probability is, however, that furs and woolens are animal substances, endowed with a vital principle, which develops itself into the living organisms through the decay of its material shape. Cleanliness and airing are, therefore, absolutely essential.

DOMESTIC RECEIPTS.

TO MAKE PEA SOUP.—To four quarts of water, put in one quart of split peas, three slices of lean bacon (or a ham bone if at hand,) and some roast beef bones, one head of celery, one turnip, and two carrots, cut into small pieces, a little salt and pepper; let all these simmer gently until the quantity is reduced to two quarts. Run it through a cullender, with a wooden spoon. mix a little flour in water, and boil it well with the soup, and slice in another head of celery, adding cayenne pepper, and a little more salt. Fry slices of bread in some butter until they assume a light brown color, cut them into small squares, and hand them with the soup, as well as a small dishful of powdered dried sage.

TO MAKE CREAM PANCAKES.—Take the yolks of two eggs, mix them with half a pint of good cream, two ounces of sugar; rub your pan with lard, and fry them as thin as possible; grate sugar over them, and serve them up hot.

QUEEN CAKES.—One pound each of flour, sugar, and butter worked to a cream; the yolks of five eggs, the whites of ten. A few caraway and coriander seeds if liked. They are best baked in small, well-buttered tins; a few currants should be strewn in the bottom of each tin. Half an hour in a slow oven is sufficient.

TO EXTRACT GREASE FROM SILK.—Wet the part with eau de cologne, and gently rub the silk upon itself between the hands. When dry the grease will disappear. This will also remove recent paint, and the grease from a wax candle.

A CHILD is never happy from having his own way. Decide for him, and he has but one thing to do; put him to please himself, and he is troubled with everything and satisfied with nothing.

CONTENTS OF THIS NUMBER.

Thoughts Suggested by May.....Page 129
Pay your Debts.....130
A Prayer—Best time for Grafting.....131
Whitewash for Shingles—Respect the Earth Worm.....132
Liquid Grafting Wax.....132
What a Garden may be—Beans as a Field Crop.....133
Effects of Soil on Grapes—New Mode of Cultivating Corn...134
Advantage of Large Corporations.....135
Turban Squash—Lice on Cattle.....136
Farm Economy.....137
New Books.....138
Extracts and Replies.....138, 146, 158
Reminiscences of Cheshire.....139
Cutting Feed for Horses.....141
Seeding Land to Grass.....142, 151, 158
Production of Double Flowers—Factory Spiders.....142
Douglas Axe Manufacturing Company.....143
Cutting Feed for Stock.....144
Skin Diseases in Animals—Treatment of Croup.....144
Report of Hon. Joseph H. Wright.....145
Choice Vegetables.....146
Tobacco Culture.....147
Canker Worms—Wild Parsnips.....150
Vegetable Garden—Culture of the Parsnip.....151
New England Agricultural Society.....152
Experiments with Coe's Superphosphate of Lime.....152
In Council with the Hillsboro', N. H., Farmers.....154
Clapp's Favorite Pear.....156
June is the Time to Prune Fruit Trees.....157
On Butter-Making—Soap Suds.....157
A Hint to Farmers.....158
Ladies' Department.....159
Review of the Cattle Markets.....160

ILLUSTRATIONS.

Initial Letter F.....129
Turban Squash.....136
Tobacco Culture—eight engravings.....148, 150
Clapp's Favorite Pear.....156

CATTLE MARKETS FOR APRIL.

The following is a summary of the reports for the four weeks ending April 13, 1864:

NUMBER AT MARKET.

	Cattle.	*Sheep.*	*Shotes.*	*Fat Hogs.*	*Veals.*
Mar. 23	1478	5843	250	—	150
" 30	966	3759	600	900	250
April 6	1636	3944	945	800	400
" 13	1311	6262	600	600	550
Total	5390	19,808	2405	2300	1350

The following table exhibits the number of cattle and sheep from each State for the last four weeks, and for the corresponding four weeks last year; also the total number since the first of January, of each year:

	THIS YEAR.		LAST YEAR.	
	Cattle.	*Sheep.*	*Cattle.*	*Sheep.*
Maine	451	149	423	—
New Hampshire	600	5234	599	3009
Vermont	933	5420	1310	4482
Massachusetts	659	6021	538	2496
Northern New York	106	—	40	40
Western States	2628	2984	2641	1149
Canada	13	—	57	175
Total, last four weeks	5,390	19,808	5,608	11,351
Total, since Jan. 1, (15 weeks,)	21,900	70,430	22,512	42,799

PRICES.

	Mar. 23.	*Mar.* 30.	*April* 6.	*April* 13.
Beef, 1, 2, 3 qual.	8 @10¾	9 @10¾	9 @11½	9 @11½
" ex. and prem.	11 @11½	@12	12 @12½	12 @13
Sheep & lambs, ₩ lb.	6½@ 7¾	7 @8	8 @8¾	8½@9½
" " extra	8 @9	8½@10	9 @9½	9½@10
Shotes, retail	7½@8½	9 @10	9 @11	9 @11
Beef hides, ₩ lb.	9½@10	9½@10	9½@10½	9½@10½
Pelts	$3½@4	$3½@4	$3½@4	3½@4

Remarks.—Live stock has been sold higher during the past four weeks than ever before at this market. Drovers who could calculate the value of an animal at any accustomed price ₩ lb. almost instinctively, now say that they must stop and cypher. The last market (April 13,) was undoubtedly the highest of all the high Brighton markets on record. Retail butchers had to pay full 13½c ₩ lb. for choice of Western steers, and 10c ₩ lb. live weight, for sheep. And yet it will be noticed that these high prices have not, as yet, materially reduced the consumption of meat. The number of cattle sold is somewhat reduced, but that of sheep is increasing. By the following table it will be seen that the number of sheep at market this year is very much larger than last year, or the year before:

	Cattle.	*Sheep.*
1862, (first 15 weeks)	38,318	40,304
1863 " " "	22,512	42,799
1864 " " "	21,900	70,430

At retail, cuts of beef are quoted from 8 @ 30c ₩ lb., mutton 12½ @ 20c, veal 9 @ 18c, and no fish in market, as the East wind has prevailed for the last three weeks. Few farmers dare pay $100 to $250 for working oxen, and consequently the stores go for beef mostly.

The following from our report of sales, April 13, will show the state of the market:

G. W. Barker sold 4 oxen to R. Thomas for $435, equal to 11½c ₩ lb; one pair to Mr. White for $180, or 11½c; 4 cows for $198, or 10c, and 2 other cows at 10c ₩ lb.

Day, Norton & Taylor sold 66 rich, heavy river cattle to N. & S. Jackson at 12 to 12½c ₩ lb.

G. W. Morrison sold 4 fine oxen to Mr. Trask for $535, or 12½c; two of them, however, a pair of four-year-olds, fed by Mr. Glidden, of Webster, N. H., were so fat and handsomely shaped that the half cent belongs to them,—making the Glidden oxen 13c and the others 12c ₩ lb; 4 to Henry Zoller for $410 or 11c ₩ lb; one pair to C. Patch for $144, or 10½c ₩ lb.

W. I. Sabin sold to S. S. Learnard 9 oxen fed by Jonathan Chapin, of Bellows Falls, Vt., at 12c ₩ lb.,—a good bunch of cattle. Two other oxen to Mr. Smith for $190, or 10c ₩ lb; one odd ox laid at 900 lbs, for $91, and a pair of steers to C. Atherton for $120.

John Robinson sold to C. Patch one pair of oxen for $266, or about 12c ₩ lb, and one pair for $175, or 11c ₩ lb, on estimate of buyer.

William N. Patterson sold 4 oxen to Col. Dana, laid at 37 or 3800 lbs, for $425; also an extra pair of oxen, laid at 2400 lbs, for $288, which were fed by Mr. E. Waterman, a young farmer of Fairlee, Vt., who we hope will be as well satisfied with the price, as the buyer was with the quality of the oxen.

Wm. Scollans & Co. sold 130 Western steers in lots, as follows, ranging from 1129 to 1348 lbs. each, by the lot:—15 at 13c, 28 sk; 22 at same price; 14 at 10½c, 30 sk; 35 at 10c, 30 sk; 25 at 13c, 27 sk; and 24 at 13c, 28 sk.

A. N. Monroe sold 10 averaging 1444 lbs, live weight, at 13c, ¼ sk; 5 of 1122 lbs, at 13c, 28 sk; 10 of 1150 lbs. each, at 13c, 28 sk; 4 of 1364 lbs. each, at 13½c, 28 sk; 6 oxen, 1686 lbs. each, at 13½c, 28 sk; 3 of 1140 lbs., at 13½c, 28 sk; 16 of 1421 lbs, at 13c, 30 sk.

John Fall sold 4 oxen for beef at 11c ₩ lb, and 3 pairs as workers as follows; 1 pair 6 ft. 4 in. for $160; one pair 6 ft. 3 in. for $175; one pair 6 ft. 8 in. for $185, and had two pairs unsold, about 6 ft. 6 in. each, for which he had been offered $160 for one pair, and $170 for the other. D. A. Philbrick sold a pair of New Hampshire workers, 6 ft. 9 in. 2800 lbs, for $185.

M. T. Shackett sold to J. W. Hollis, an extra milch cow raised by himself in Middlebury, Vt, and recommended to be A No. 1, for $160. G. W. Barker sold 2 Vermont milkers at $90 for the two. Herrick Woodard sold one milch cow for $50, and another one for $28.

Butter is so unusually high this spring, that calves are sent to market younger and poorer even than heretofore, crowded as the market always is every spring with what the Yorkers call "bobs." One lot of 50 was sold at $3.75 each; another of 48 for $534, or nearly $7 each, 40 others at $8 each, 2 at $8 each, and small lots higher, according to quality.

Geo. W. Jones sold 200 sheep at 9¼c ₩ lb; G. W. Barker sold 50 sheep, about 75 lbs, at 8¼c; W. H. Bardwell sold 200 sheep at 9 to 10c ₩ lb; DeWolf & Prouty sold 110 sheep, 90 lbs. each at 9½c ₩ lb; and 111 to Dan Brown, about the same weight, but of better quality, at 9¾c; M. T. Shackett sold 50 sheep, 84 lbs. each, at 8½c, and 50 sheared ones, 77 lbs for $4 ₩ head; Dudley & French sold one lot of 72, at $6 ₩ head, estimated to average 75 lbs; 79 others, 80 lbs. each, at 8¼c, and 30 of 94 lbs. each, at 9c ₩ lb, and others on commission; J. N. Morse sold 115 at 8¾c, somewhat wet; J. Lyman sold at 9½ to 10c, L. Stearns one lot of 100 lbs, at 10c, and we understood that many of the best lots of river and other sheep were sold at 10c ₩ lb; one lot of De Coster's sheep averaged 150 lbs.